BIENNIAL REPORT

OF THE PRESIDENT

of the

UNIVERSITY OF FLORIDA

to the

BOARD OF CONTROL

FOR THE BIENNIUM
ENDING JUNE 30
1944

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REPORT OF THE PRESIDENT OF THE UNIVERSITY

To the Honorable Board of Control of
State Institutions of Higher Learning of Florida.

GENTLEMEN:

My last biennial report covered the period embracing the beginning of the war and certain adjustments that were made necessary at the University because of that fact. During the biennium closing June 30, 1944, the complete facilities of the University were involved in the war effort. At the same time, the entire program of service to civilians was kept intact. The details of all activities are set forth in the reports of Deans, Directors, and other administrative officers. I shall confine myself to the principal features and some of the high lights of the period, attempting in short compass to summarize this critical two-year interval. The period was one of constant readjustment and intense activity, and the University carried on, under most difficult conditions, with more success and less impairment of its normal functions than could have been anticipated.

In the early stages of the war, the enrollment did not fall so rapidly as might have been expected. In the academic year 1941-42, which marked the opening of hostilities, 3,239 students were enrolled in the regular session and 3,202 in the summer terms. During the biennium under consideration the enrollment began to drop, and this tendency was greatly accelerated by the amendment of the Selective Service Act which reduced the induction age to eighteen years. Deferments were granted to a limited number of students who were preparing for certain critical occupations in the fields of engineering, physics, chemistry, and other technical areas essential to the best conduct of the war. Aside from these deferred students, available material for civilian programs at the University of Florida was confined to boys with physical disabilities, others under eighteen years of age, and a few women. By the end of the biennial period there were fewer than a thousand civilian students on the college level in the University. To these were added about five hundred students in the P. K. Yonge Laboratory School.

During the biennium the policy of the administration has been to hold together the staff of the University as effectively as possible while making the maximum contribution to the war effort, and preserving intact all of the services demanded for civilians. The reduced enrollment and the demand for trained personnel by the armed forces made it possible to grant many members of the staff leaves of absence for service in the armed forces or in war production activities. A high degree of flexibility has been maintained and, apart from the loss of some members of the staff who left the University for more remunerative positions, the integrity of the institution has been preserved.

A principal factor in carrying out the above policy has been the ability to use our facilities in large measure for assisting in the winning of the war. In my last report I described a Chemical Warfare School, the Civilian Pilot Training Program carried on in cooperation with the Civil Aeronautics Administration, and other war efforts. Our war activities have been greatly expanded during the biennium under discussion. Three extensive training services, including an Officer Candidate School, an Army Air Forces Air Crew Training Program, and the Army Specialized Training Program for engineers and technical personnel, have been operated by contract with the War Department.

The Extension Services, both General and Agricultural, have carried on enlarged programs, and wartime research has been stepped up tremendously both in engineering and in agriculture. Some of this research is confidential and may not be revealed until the war is over.

TRAINING PROGRAMS

On September 28, 1942, an Officer Candidate School was activated at the University of Florida for the purpose of training officers who would serve the Army in an administrative capacity. There were about six of these schools in the country, the third of which was established at the University of Florida. Over 1,300 officers were instructed at and graduated from this School, nearly all of whom are now actively serving in the Army. The School was operated directly in cooperation with the Adjutant General's Office, War Department, and received high commendation from the War Department.

Following negotiations with the Army Air Forces, in February, 1943, there was activated at the University a program for the training of air cadets with a quota of 750 trainees. Beginning with the following May, and continuing with reasonable regularity with the graduation and replacement of approximately 150 trainees monthly until the close of the program in June, 1944, the University served in the training of 2,994 members of the Air Forces. The University was responsible for the academic instruction and physical training demanded in the program, while officers and men of the Air Corps were assigned to the detachment to provide over-all supervision for the program and specific responsibility for the military training. The academic program consisted of mathematics, physics, history, geography, English, civil air regulations, and medical aid. Each trainee also had ten hours of flight instruction.

In June, 1943, there was activated a unit of the Army Specialized Training Program, having as its objective the preparation of technicians needed for the several services of the United States Army. The program at the University, to which 494 trainees were originally allotted, was designed to cover the Basic Phase Curriculum and the Advanced Phase Curricula in Engineering. These were followed by a group of approximately 100 former advanced ROTC students of the University, whom the military authorities returned to pursue their studies and training until openings in Officer Candidate Schools occurred, by nearly fifty trainees in the Preprofessional Curriculum leading to medicine and dentistry, and by allotments of reservists. In all, up to July 1, 1944, the University had enrolled nearly 1,500 men in these various phases of the Army Specialized Training Program. In the Basic Phase Curriculum, the trainees studied chemistry, mathematics, physics, English, history, geography, and engineering drawing; in the Advanced Phase, the trainees pursued those studies usually required by professional schools of engineering, medicine, and dentistry. As with the Army Air Forces, the University assumed responsibility for instruction in the academic subjects and for physical training, while the Commandant and his staff had charge of the military training and discipline.

Mr. Kenneth R. Williams, who was appointed Director of War Training Programs, resigned in May, 1944, and was succeeded by Dr. J. Hooper Wise. The President of the University served as a member of an Advisory Committee consisting of ten college presidents who were asked to cooperate with the War

Department in planning and developing the Army Specialized Training Program.

Although contracts with the Federal Government did not permit profits to be made by the institutions having war training programs, a considerable saving was effected through the absorption by the Government of costs for operation, equipment, instruction, and other necessary functions which otherwise would have had to be paid from State funds. In the training of Air Cadets and in the Army Specialized Training Program a total of more than a million and a quarter dollars was paid to the University by the Government. Of this amount something over $750,000 was expended on operation, on the Cafeteria, Residence Halls, Infirmary, Florida Union, Book Store, and on other service units. During these programs 1,600 men were fed three times a day and all were housed in the University Residence Halls. A sum of $527,238.07 was transmitted to the State Treasury for payment of salaries, use of facilities, and depreciation on buildings and equipment. There was a net saving on the University budget of $205,333.36, of which $135,907.00 was used to balance the budget. A large reduction in anticipated income from student fees was brought about by the drop in enrollment. Details of finances during the biennium are set forth in the report of the Business Manager, but it may be noted in passing that there was a balance of $69,426.36 available to the University from the two programs as of June 30, 1944.

These programs enabled the University to retain the services of most of its faculty and to utilize its plant facilities during the period when it experienced its lowest civilian enrollment. Through the extra funds made available by the programs, an opportunity was provided for paying the staff for overloads carried, and some increases in salary were made possible. Without these increases, there would have been considerably more sacrifice on the part of the staff, and the number of persons leaving the University for more remunerative employment would have been much larger.

There were other training programs, including pre-radar courses, in which some 150 students were trained in 1942-43.

A very effective and important phase of the training given through the extension service of the College of Engineering was the Engineering, Science, and Management War Training Program, in which approximately 3,000 persons were trained during the first year of the biennium and 2,000 during the second year. Seventy-five sections of thirty-three different courses, ranging from elementary physics and mathematics for high school teachers to postgraduate courses in aircraft engineering, were given. The program was operated in eleven cities of the State in order to spread the benefits of this adult education among as many citizens as possible. This work was conducted under the direction of Professor N. C. Ebaugh, Head of the Department of Mechanical Engineering.

GENERAL EXTENSION DIVISION AND AGRICULTURAL EXTENSION SERVICE

Both the General Extension Division and the Agricultural Extension Service have considerably enlarged their activities during the past two years. The General Extension Division has made a notable contribution to national and civilian defense. Approximately 2,000 men in the armed forces have been given correspondence courses through the University of Florida. The University, through this Division, follows the flag to where they are — to England, India, and

literally to the ends of the earth. G. I. Joe has been offered 352 courses on the college and high school level. Numerous other war activities have been carried on by this Division, of which two were conducted in cooperation with the Adjutant General of Florida. The first involved the registration of workers on the job at Camp Blanding for Selective Service, thereby saving 200,000 vitally important work hours; the second, the coordination of the State Defense Council's training program. Schools were conducted for 1,773 instructors to train the Citizens Defense Corps in fire, gas, and other defense subjects required by the Office of Civilian Defense. By January, 1943, the State Defense Council reported a total of 86,641 persons enrolled.

During the present war the Agricultural Extension Service has been confronted with the greatest responsibilities in its history. In times past its activities have been confined purely to education. Because of the gigantic and essential demand for adequate food supplies, the Congress called upon the Extension Service to undertake the administration of a program providing for the recruiting, transportation, and housing of labor to relieve the shortage brought about by the drafting of farm youth into the armed forces. Under agreement with the United States Department of Agriculture, allocations of funds were made by the Federal Government for this important work. Twenty-six labor camps were provided with a combined housing capacity of more than 13,000 workers, and 3,650 laborers were imported into the State. Of these 1,600 were Jamaicans, 1,200 were Bahamians, and 850 were prisoners of war. These workers have been supplied for the harvesting of citrus fruits, strawberries, potatoes, peanuts, sugar cane, and other Florida crops.

The Agricultural Extension Service has also carried on an Emergency War Food and Conservation Program, under which instructional courses have been given in every community and in rural areas of the State to teach modern methods of canning and preservation of foodstuffs. This was particularly helpful to thousands of families who planted Victory gardens.

During the biennium $275,000 was allocated by the United States Department of Agriculture to the Agricultural Extension Service programs, which were conducted with economy as well as efficiency. As a result, substantial balances were returned to the Government at the expiration of budgetary periods.

RESEARCH

More research has been done at the University during this biennium than at any other time in its history. Much of this research is related to the war effort, particularly in the fields of engineering and agriculture. Engineering research in behalf of the war effort has been subsidized by the Federal Government, and for this purpose approximately $112,000 has been received during the biennium. In addition, the 1941 session of the Florida Legislature appropriated $50,000 per annum for strengthening and developing the Engineering and Industrial Experiment Station. Funds from this appropriation were made available by the Budget Commission in the second year of the biennium. Most of the research being done for the Government is of a secret nature. However, rather outstanding results have been achieved, and these will create pride in all friends of the University when the facts are revealed. For the development of industries and the utilization of the State's products, researches are being carried on in the utilization of lime rock, waste products, particularly in the

field of wood processing and canning, and minerals. The possibility of establishing a ceramic industry in Florida is being diligently explored.

There are two ways in which the State can enrich itself. It must either exploit the wealth created by others or create wealth for itself. Through the Engineering Industrial and Experiment Station the University has been given a fine opportunity for creative research which will upbuild the economic structure of the State of Florida.

Agricultural research has been applied vigorously in the fields of food production and nutrition since these were of major assistance to the war effort.

Not only in engineering and agriculture have there been increased activities in research but with the reduction of teaching loads, which have long been too heavy at the University, the scientific staff of the institution has been enabled to make larger contributions than have hitherto been possible.

STUDENTS AND FACULTY IN THE ARMED FORCES

Through the Alumni Office, a monthly bulletin, *The Fighting Gators*, has been sent to parents of servicemen for transmittal to them in the field. Included each month are news items giving accounts of the activities of alumni in the armed services and listing those reported wounded, taken prisoners of war, or lost by death. At the end of the biennium, it was estimated that there were some 8,000 alumni in the armed services, and actual reports had been received from more than 4,000 of these. About one-half were graduates. Among the graduates 76 per cent were officers, 12 per cent non-commissioned officers, and 12 per cent privates and seamen. Of the non-graduates, 31 per cent were officers, 35 per cent non-commissioned officers, and 34 per cent privates and seamen. One hundred and seventy-eight have been listed as killed in action, fifty-eight as missing, and thirty as prisoners of war.

It is a source of considerable satisfaction that the percentage of former students of the University of Florida who are serving in the war effort is as large as that of other institutions of higher learning. Furthermore, Floridians in all parts of the World War theatre have displayed unusual valor. In part, this is indicated by the fact that 235 have won some 553 decorations. Among the outstanding aces in the Air Corps are Lt. Don Fisher, '41; Captain Robert C. Miller, '40; Captain John F. Bolt, Jr., '41; Colonel John Alison, '35; Captain Herbert H. Long, '42; Lt. Louis A. Menard, Jr., '40; and Captain Sheldon Brinson, '38.

The contribution of the faculty in the war training, extension, and research programs has already been mentioned. As stated in my last biennial report, the University early adopted as a major policy the principle that positions made vacant by leaves of absence or resignations be filled only as emergency or necessity dictated. At the height of the training programs it was necessary to augment the faculty by recruiting additional members, some from beyond the borders of the State. In this way the staff has been kept flexible and has been adjusted to wartime demands. Annual leaves of absence were granted from the outset of the war emergency to members of the faculty and staff who could be spared for services in the war. Some members of the staff, occupying position in critical fields, were requested to remain at the University rather than accept war service. One hundred and forty-eight members of the staff were granted leaves. Of this number 107 entered the armed services, including eighty-six from the instructional staff and thirty-one from the administrative and main-

tenance staff. Five accepted positions related to the war effort, two pursued work towards their doctorates, while twenty-four whose services were not required at the University were allowed leaves for personal reasons. Practically all of those on military leave have commissions in the various branches of the armed services.

CIVILIAN PROGRAM

As previously mentioned, during the biennium there was a decrease in the enrollment of civilian students which was rapidly accelerated by the induction of able-bodied boys down to the age of eighteen years. However, the Army trainees, together with the civilian students, substantially increased the enrollment until, during the second year of the biennium, there was a total enrollment of 4,717 students, the greatest number of any year in the history of the institution.

All colleges and departments of the University were kept open and no educational opportunity was denied civilian students. Student activities continued on an abbreviated scale for the most part. Student government, the Honor System, most of the fraternities, intramural athletics, and the usual activities were continued. Intercollegiate sports were discontinued in the year 1943-44. Some of the fraternities became dormant and their social activities were reduced to a minimum. During a part of the period under survey the University leased some of the fraternity houses and made them a part of the Residence Hall system for the use of civilian students. This adjustment was necessary because the Army trainees occupied the campus Residence Halls.

HONORARY DEGREES

At the 1944 Commencement of the University of Florida, honorary degrees were bestowed upon two outstanding alumni of the University and one scientist of great renown. The honorary degree of Doctor of Science was conferred upon Dr. Thomas Barbour, Director of the Harvard Museum of Comparative Zoology, Mr. Herman Gunter, Director of the Florida Geological Survey, and Mr. Eugene Terry Casler, Assistant Manager of the Florida Phosphate Division, International Minerals and Chemical Corporation.

BUILDINGS AND EQUIPMENT

The War Department paid the University 4 per cent on the value of buildings which were used in the war training programs. These funds, added to those available from State appropriations, have enabled us to keep the plant in exceptionally good condition and even to improve some of the buildings. While the shortage of labor has, to some extent, hampered our maintenance service, the physical aspect of the University is, on the whole, better than could have been expected after two and a half years of war.

The Legislature, in its General Appropriation Bill of 1941, made provision for the erection of three new buildings at the University of Florida. These included: (1) an addition to the University Library, $150,000; (2) a College of Business Administration Building, $150,000; and (3) a Dairy Barn, $50,000. The sum of $80,000 was also appropriated for the rehabilitation of the Agricultural Experiment Station Building. Because of the shortage of materials and labor, it was impossible to erect any of the new buildings authorized. By constant and indefatigable efforts, the rehabilitation of the Agricultural Experi-

ment Station Building, begun in the previous biennium, was sufficiently completed to permit occupancy. The renovated building is of fireproof construction and has a new interior design built into the walls and under the roof of the old building. The available space has been increased approximately one-third. This building was very appropriately dedicated to the memory of Dr. Wilmon Newell, who in 1921 became Director of the Agricultural Experiment Station, as well as Director of the Agricultural Extension Service and Dean of the College of Agriculture. After a period of extraordinary service, Dr. Newell was taken from us by death in 1943.

GIFTS AND GRANTS

The University of Florida, in recent years, has been more fortunate in the recognition of its needs through gifts and grants from private sources than is usual with state-supported institutions. Most of the funds made available to us have come from the foundations. Totaling $130,761.11, they include:

General Education Board for Research in Nutrition, First Half of a $50,000 Grant	$ 25,000.00
General Education Board for the University Library, Second Half of a $40,000 Grant	20,000.00
General Education Board, Work Simplification Project	5,000.00
Alfred P. Sloan Foundation for Project in Applied Economics	28,475.00
State Board of Pharmacy for the Bureau of Professional Relations, School of Pharmacy	7,000.00
Florida Lime Rock Foundation for Experimentation with Lime Rock	15,000.00
Florida Crippled Children's Society for a Special Course in the Summer	425.00
Wallace and Tiernan, Incorporated, Fellowship for Investigations in Chlorination of Water	5,000.00
Florida Federation of Garden Clubs, Horticulture Fellowship	2,000.00
Renewals of the Duncan U. Fletcher and James D. Westcott Scholarships, and the Napoleon B. Broward Fellowship	3,000.00
Renewals of the Sears, Roebuck Agriculture Scholarships	2,305.00
Burpee Horticultural Fellowships for Latin American Students	4,300.00
Vocational Rehabilitation Scholarships	8,256.11
Miscellaneous Gifts, Ranging in Value from $50 to $1,000	5,000.00
	$130,761.11

P. K. YONGE LIBRARY OF FLORIDA HISTORY

Probably the most important acquisition ever received by the University from the standpoint of culture and the advancement of research was the P. K. Yonge Library of Florida History, presented by Mr. Julien C. Yonge, of Pensacola, as a memorial to his father, for many years a member and Chairman of the State Board of Control. No history of Florida, possessing the dignity and scholarship which is worthy of the State, has ever been written. Obstacles which have prevented this have included inaccessability of primary source materials. The Yonge collection consists of a veritable thesaurus of newspapers, maps, pamphlets, books, records, and other materials relating to Florida. It is the largest and most inclusive collection of its kind in existence. One of the conditions of this munificent gift was an agreement by the Board of Control that the collection would be housed as a separate unit in the new wing of the University Library when erected. It has been temporarily placed on one of the floors of the Law Library. The University is already actively engaged in securing increments to this collection, including photostats and microfilms of valuable Floridiana in the Library of Congress.

It is hoped that materials can be brought together rather quickly for an appropriate observance of Florida's Centennial, and that in the course of a few

years a worthy history may be written. No state has a richer tradition and background than Florida, deep-rooted as it is in Spanish, French, and English cultures.

UNIVERSITY PUBLICATIONS

Aside from the researches in Agriculture, the University has always suffered from a lack of resources for the publication of the researches of its staff. It is manifestly wasteful to pay salaries to persons of creative ability and to buy expensive equipment without being able to publish the results of investigations and researches which have great public value. Furthermore, it is a decisive discouragement to those who are capable of making constructive contributions not to have their researches published.

As is evidenced by the fact that the University of Florida was one of the first universities in the South accorded a chapter of Sigma Xi, recognized as the hall mark of unusual accomplishments in the field of scientific research, the staff has turned out abundant results of research through the years, many of which have remained unpublished because of a false economy. Other institutions have often published the results of our scientific endeavors, thus enjoying in part the credit that should belong to the University, and profiting the states beyond our borders. During the biennium the Board of Control, with the support of the State Board of Education, made available from reserves a revolving fund of $10,000 for the publication of worth-while products of the University staff.

PATENT AND COPYRIGHT POLICY

Closely related to the stimulation of research through publication is the policy in an institution which governs patents and copyrights. Until recently the University did not have a well-conceived plan or policy relating to patents and copyrights. During the biennium, regulations covering these matters, based upon studies and recommendations of the University Research Council, were finally established. The patent policy of the University is an epitome of that of the United States Government and similar to that of several other progressive universities. In the achievement of this important stimulus to research, the Governor of the State, the Attorney General, the Chairman of the Board of Control, and others cooperated most effectively.

THE POSTWAR PERIOD

Amid the extraordinary demands made upon the facilities of the University in the war effort, the future has not been overlooked. Various committees have been actively engaged in making studies which will enable the University to move into the postwar period with the prospects of enlarged and more effective programs of service. Ten years ago the freshman and sophomore years of the University curriculum were reorganized in accord with a unified philosophy of education. This gave rise to the General College which is now being adopted in principle by numerous other institutions. The Upper Divisions of the University have been under careful study by postwar planning committees. These plans relate to agriculture, adult education, the social sciences, the biological sciences, the physical sciences, the humanities, including religious education, student health, and other vital matters.

RECOMMENDATIONS

In this report many needs of the University might be chronicled but I will confine myself to two general recommendations.

1. *Plant and Building Requirements.* In the postwar period there is every prospect that the University will be called upon to serve many more students than it has done in the past. The large increase in the population of the State, the suspension of educational opportunities for youth because of the war, the return of large numbers of veterans whose education will be provided for at Government expense, the advertising which Florida has received through the numerous young men who have been stationed in the State in connection with military, naval, or air training programs during the war period, as well as other factors, will provide an unprecedented enrollment. The plant is inadequate to handle 3,000 students. There will be a dire need for classroom space, as well as additional laboratory, library, and recreational facilities.

Therefore, I recommend that the Board of Control urge the Legislature to reappropriate at the earliest feasible moment the amounts for the three buildings provided in the 1941 Appropriation Bill and such additional buildings as may be possible.

2. *Increased Remuneration for Members of the Staff.* Within a decade and a half the State's resources, according to the Comptroller's reports, have practically quadrupled. The annual income from the State has increased from slightly over $33,000,000 in June, 1929, to approximately $118,000,000 in June, 1944. The State funds received by the University in this biennium were only slightly in excess of those available during the first biennium in which I came to the University some sixteen years ago. The 1928-29 State appropriation for the University was $749,152 while the 1943-44 appropriation was $970,425, of which $100,975 was an emergency appropriation to protect personnel in the armed forces and no part of which was used. Accordingly, the increase in State funds during the past sixteen years of my administration was only $120,298. Through the same years in which the State's ability to support the University increased nearly 300 per cent, the actual support of the University by the State increased only about 13 per cent.

The average or median salary at the University of Florida is considerably below that of similar institutions in the United States. Consequently we suffer a continuous draft upon our human resources. As fast as we develop young men who have brains and ability, they are drained off into other parts of the country. Therefore, because the State is in the best financial condition of its history and is better able to support the University than ever before, I recommend that the Board of Control adopt a budgetary request that will enable the University to increase, as far as possible, the remuneration which may be paid to members of our staff who show merit.

CONCLUSION

As usual, at the close of the biennium, I feel deeply indebted to many persons and have no adequate words in which to express my gratitude. I have endeavored so to steer the University through these difficult war days as to preserve the essential elements of a great institution of learning, assist our nation in the most crucial war in history, and plan for a greater University to serve a greater Florida. In these efforts, I have had uncommon cooperation from my colleagues,

both of the administrative staff and the teaching faculty, as well as from the students. These two years have been peculiarly burdensome for members of the Board of Control, because of the almost continuous readjustments in staff and budgetary requirements, not to mention the extraordinary problems arising of necessity from the war situation. I want to thank each of them for his patient consideration and for the constructive help which he has given. Beyond the Board of Control is the Board of Education which has, under the leadership of a Governor who, as an alumnus of the University of Florida, was peculiarly fitted to understand its needs, supported us in every possible manner. And beyond the Board are the people of the State of Florida whose University we are endeavoring to administer. To all of these and others I express my grateful appreciation.

Respectfully submitted,

JNO. J. TIGERT,

President, University of Florida

REPORT OF THE DEAN OF STUDENTS

To the President of the University:

SIR: As a result of the war emergency, several changes have taken place in the Office of the Dean of Students during the past biennium. In particular, it should be noted that Assistant Dean J. Ed. Price was transferred to the teaching faculty where he taught in the war training courses during the regular session. In addition to his teaching responsibilities, he has continued to work as Director of Student Employment and Placement and has guided and counseled students and student groups.

The reduction in size of the student body has created a serious situation with reference to maintaining wholesome student life. The presence of more soldier trainees than civilian students on the campus has, to some extent, complicated student morale. In the interest of maintaining a nucleus in the various phases of extracurricular and non-classroom activities, it has been necessary to work more intimately with student leaders and student groups in order to compensate for the lack of student leadership. The rapid turnover in students caused by accelerated courses and the draft has taken from the student body most of those who naturally would have developed into student leaders. The reduction in student enrollment has not necessarily decreased the need and demand for individual counseling and interviews. On the contrary, wartime conditions have caused a larger proportion of students to seek counsel and guidance.

The following is presented as a summary of important projects and problems:

I. Projects:

A. Revision and publication of the *Bulletin of Information on Scholarships, Loans and Student Employment.* This was reprinted and approximately 3,500 copies were distributed to the high schools in the State.

B. Revision and publication of the Constitution of the Student Body. This publication will be used in lieu of the *"F" Book,* which ordinarily contains the Constitution of the Student Body, as well as the By-Laws and Charters of the student government organizations.

C. Work with the faculty director and staff of *The Florida Alligator.* The publication of this newspaper was made possible through the participation of both civilian students and soldier trainees, and proved to be an asset in maintaining high morale on the campus.

D. Conducting a survey among alumni, faculty advisers, and fraternity officials relative to the postwar needs of fraternities. A six-point plan has been suggested for rehabilitation and improvement.

E. Acting as adviser to the Nellie Swanson Fulk Memorial Cooperative Living Organization, which function included in June, 1944, the transfer of this property from the Board of Trustees to the University of Florida.

II. War Activities:

A. Orientation program for all groups of soldier trainees on their induction into the University for both Air Corps and Army Specialized Training Program students.

B. A religious census of all soldier students, with the denominational list furnished to each of the denominations represented in Gainesville.

C. Supervision of all war fund campaigns on the campus, including the United Service Organizations, National War Fund, and Red Cross drives. This included three of the last, one War Fund, and one USO drive. A total of $14,592.58 was contributed by the faculty and staff of the University.

The operation of the Residence Halls during the period was characterized by heavy and continuous use of facilities by various government units, a large enrollment of civilians when facilities were available, a rapid turnover among civilian residents, continual shifting of property, and the operation of off-campus Residence Hall units to provide additional facilities for civilians.

The following military and civilian units were housed in the dormitories from August 1, 1942, to June 30, 1944: Parent Teachers Association Short Course; Future Farmers of America Short Courses; Civilian Protection School; Civil Aeronautics Administration; Engineering, Science, and Management War Training; Army Administration Officer Candidate School, No. 3; Army Air Forces, 62nd College Training Detachment; and the Army Specialized Training Program.

At the peak enrollment of military units, 1,717 Army trainees were housed in the Residence Halls. At the same time that the Halls were filled with military units, six fraternity houses were operated as Residence Halls to provide additional facilities for civilian students. These complex operations were carried on with no increase in personnel except maid service.

Improvements made during the period under review included: (1) installation of an inventory numbering system designed to identify each item of room equipment as to location and condition; (2) improved civilian room assignment methods designed to eliminate unnecessary correspondence and to speed up service; (3) installation of maintenance and repair reporting and recording systems to maintain accurate records of room conditions; and (4) purchase of many items of equipment, some under activation costs, which will increase the comfort and utility of the Halls. Every effort has been made, through repeated

inventories and constant room checking, to protect property and to keep repairs up-to-date.

Work which must be done as soon as materials are available includes re-roofing of Buckman and Thomas Halls; remodeling of Buckman B and C, and Thomas B; redecoration of rooms in both Sledd Hall and Thomas Hall; and repair of much equipment, particularly mattresses which were heavily worn by military usage.

A Student War Loan Program was set up to enable college and university students majoring in certain fields to accelerate their educational program. At the University of Florida students majoring in engineering, pharmacy, chemistry, and physics were eligible for these loans. The status of this program to date is as follows:

Total amount loaned to University of Florida Students	**$23,171.15**
Number of individual loans granted	131
Number of students participating in the program	83
Number of students who participated in the program now in military service	55
Number of students participating in the program now in defense work	18
Number of report forms submitted to the Washington Office as of June 30, 1944	385

In addition to the above statements with reference to activities during the war period, the Dean of Students and the Assistant Dean have both maintained membership not only on numerous committees concerned with the usual activities of the University, but on special committees working on postwar plans and programs.

III. **Recommendation:**

In view of the need for more intensive work with the fraternities when the student body returns to normal size, it is recommended that a half-time assistant be added to the staff of the Dean of Students, the duties of this assistant to consist of work with campus fraternity groups.

Respectfully submitted,

R. C. Beaty, *Dean*

REPORT OF THE BUSINESS MANAGER

To the President of the University:

Sir: I have the honor to submit herewith the report of the Business Office and its subsidiary units, including the maintenance departments, for the biennium ending June 30, 1944.

The report includes a complete financial statement and balance sheet for all colleges and departments of the University, the Agricultural Experiment Stations, and the Agricultural Extension Service, as well as the Cafeteria, Soda Fountain, Bookstore, Infirmary, Residence Halls and other auxiliary units. Detailed reports are printed as exchange publications and copies are available for distribution to those interested.

Budget recommendations for the Business Office and all departments under its administration for the biennium ending June 30, 1947, will be submitted to you under separate cover, with comment on any increases or changes.

BUSINESS OFFICE

With the outbreak of the war, the University made its plant and facilities available to the Government and was able to secure an Officer Candidate Training School and, later, detachments of AAF and ASTP trainees. The total number of these trainees, with our civilian students, did not equal our prewar enrollment. However, the duties and responsibilities of this office were just as complicated, and we had more moneys and details to handle. In fact, the checking of contracts and the preparation of invoices and numerous reports essential to the efficient handling of transactions with the Army taxed our staff to the limit. The funds dealt with during this period increased to nearly three million dollars, which reduced our percentage of operating cost to about 1 per cent.

We still face the necessity of more adequate office space and facilities, which we trust may be provided in the near future through a postwar building program.

MAINTENANCE DEPARTMENTS AND BUILDINGS

While the Army programs have entailed a greater use of our buildings, owing to the fact that classes for trainees have been held from early morning until late in the evening, our plant has not been allowed to deteriorate. We have been able not only to take care of the inevitable wear and tear, but to make improvements through the installation of tile-tex floors. As a result, our plant is in excellent condition.

In December, 1942, Mr. W. Leroy Schoch, Superintendent of Buildings and Construction, requested a leave of absence to enter the armed forces and Mr. E. N. Bell, Assistant Superintendent and former Shop Foreman, was appointed Acting Superintendent to carry on in his absence. We feel that he and his co-workers have done an excellent job.

The following buildings have been completed at an additional cost during this period:

Experiment Station (Newell Hall)		
From Building Appropriations and Station Incidental Funds		$ 70,000.00
Total Cost	$115,000.00	
Wood Products Laboratory (School of Forestry)		5,000.00
Total Cost	15,000.00	
Florida Union Annex (North Wing)		10,000.00
Total Cost	30,000.00	

Other outstanding improvements are as follows:

Instructional and Administrative Buildings—Painting, repairs, and reconstruction of classrooms, as well as installation of tile-tex floors, etc., in the Auditorium, Benton Hall, Engineering Building, Peabody Hall, Library, Law Building, Post Office, P. K. Yonge Laboratory School, Seagle Building, Museum, and Artillery Stables	34,481.00
Service Units—Cafeteria, Bookstore, Soda Fountain, Residence Halls, Duplicating Department	10,458.00
Athletic Department—Buildings and Stadium—Painting seats and construction of a driveway into Stadium field, a new roof, a wind break around the swimming pool, repairs to the diving tower and showers, and painting of the Gymnasium	3,274.18
Sidewalks and Sewage Improvements on the Main Campus	3,718.00
Total of All Improvements as Listed	$136,931.18

ELECTRICAL MAINTENANCE DEPARTMENT AND TELEPHONE EXCHANGE

This Department furnished supervision, labor, and materials for the installation and/or maintenance of:

Campus primary distribution system
Campus secondary distribution system
Inside wiring (lighting and power)
Campus telephone cables (underground)
Telephone lines to and inside buildings
Communication systems inside buildings
Refrigeration units and systems
Campus street lighting system
Campus class bell system
Meters for lighting and power
Direct current power systems
Stadium lighting and scoreboard
Broadcast and Western Union lines
Appliances and apparatus

To meet the requirements of the Army educational programs, it was necessary to install 87 special exit lighting units, 21 fire gongs, 92 suspended study table lighting units in the Residence Halls, and 12 gongs in classroom buildings. Moreover, additional lighting was necessary in various rooms used as offices, and special power outlets were required in various Army classrooms.

Trouble calls for elevator service were handled by this Department. Special emphasis has been placed on the prevention of accidental electrical shock by grounding of apparatus and equipment. We have had no serious interruption of electrical service due to failure of our distribution system, but owing to the shortage of skilled labor, we have been unable to make regular routine inspections of all equipment.

Cited below are a few of the larger construction jobs handled during this biennium:

Although work on Newell Hall was started early in 1942, the greater part of the electrical distribution power and lighting has been installed during this biennium. The overhead lighting has been completed with temporary lampholders, since we plan to install fluorescent lighting fixtures at a later date. About six or eight months will still be required to install the special electrical equipment as the various laboratory rooms are completed and occupied.

In the Cafeteria and Dairy Products Laboratory installation was made of automatic controls and connecting electric motors for the cooling system. In the Food Products Laboratory installation was made of electrical connections and automatic control on special food dehydration and concentration research equipment. This equipment is saving approximately 300,000 gallons of water per month. In the Wood Products Laboratory installation of an outside transformer vault, of lighting and power outlets, and of temporary lampholders was completed. In Benton Annex lighting and power outlets were installed and special research equipment was connected for the Office of Scientific Research and Development projects. In the Animal Nutrition Laboratory complete new wiring was installed in the remodeled north wing for lighting, power, and fixtures; and special controls on research and laboratory equipment were installed.

Through the inventive ability of Mr. E. N. Bell and Mr. E. D. Godwin, Superintendent of Electrical Maintenance, an automatically controlled glass beaded projection screen has been installed in the Florida Union Auditorium.

Electrical Consumption

The kilowatt hourly consumption of electrical power dropped slightly during the biennium under consideration, but we find that the total cost and rate per K.W.H. has increased, due to the higher cost of fuel oil.

	Fuel oil per bbl.	K.W.	Amount	Rate per K.W.H.
July - Dec. 1942	$1.908	821,100	$10,620.97	1.293¢
Jan. - June 1943	1.915	851,200	10,945.84	1.286¢
July - Dec. 1943	2.041	861,600	11,589.21	1.345¢
Jan. - June 1944	1.855	923,400	11,425.82	1.237¢

From the above, we find an average rate per K.W.H. of 1.29¢ for this biennium.

Telephone Exchange

When the Army programs were at their peak, our Telephone Exchange, which operates under the supervision of Mr. E. D. Godwin, was taxed beyond its capacity to handle the load placed upon it. There were times when the load was so heavy that the operators could not answer all calls for lack of line cords on the switchboard. The 171 lines then in use, together with their extensions, totaled 294 instruments connected. Though we increased our city trunk lines to 13, the operators were often compelled to report that all city lines were busy. However, during the past few months fewer calls have been made and service is improving. Due to necessary salary increases and the loss of NYA funds for student operators, the average monthly cost per phone has increased from $2.45 to $2.68 for this biennium. Some underground cables were installed during the biennium. However, due to lack of cable facilities, it was necessary to install three overhead lines to care for necessary phones in the dormitory area.

CENTRAL HEATING PLANT

The following information summarizes a few of the costs for the Central Heating Plant from July 1, 1942, to July 1, 1944:

	1942-43	1943-44
Cold Weather Intensity, Degree Days	935	1,067
Radiation Served, Square Feet	95,000	95,000
Fuel for Hot Water in Cafeteria, Infirmary, and Laboratories, Barrels	3,200	5,200
Fuel for Building Heating, Barrels	3,197	4,174
Total Fuel, Barrels	6,397.21	9,373.95
Average Fuel Cost per Barrel, Delivered	2.15	2.09
Total Fuel Cost	$13,623.81	$19,551.43

The average cold weather for Gainesville amounts to 980 degree days, so that the cold weather for the year 1942-43 was a little below average and the cold weather for 1943-44 was a little above average. The number of buildings and amount of radiation served remained the same during both years. The fuel used for heating hot water supplying steam to the Cafeteria, Infirmary, Chemical Engineering Laboratory, Mechanical Engineering Laboratory, Chemistry Department, Wood Products Laboratory, and the Agricultural Experiment Station was greatly increased during the year 1943-44, due to the large number of Army personnel served in the Cafeteria, housed in the Residence Halls, and instructed in the various laboratories.

The appended figures indicate the number of trainees who used the mess and lived in the dormitories:

1941-42	1942-43	1943-44
Civilian 3,239	Civilian 2,710	Civilian 691
	OCS 600	OCS 600
		ASTP and AAF 1,608

There is a noticeable increase in fuel used for heating buildings in 1943-44 over 1942-43, more than would be justified by the increase in cold weather intensity, which is partly due to operating through holiday periods because of Army personnel. Formerly, we had been able to effect a saving during such periods by shutting off the heat. The Army personnel stationed in the Residence Halls required more heat than had ever been furnished to civilian personnel housed therein. The fuel costs during this biennium increased from $1.54 (during the year 1941-42) to approximately $2.10 per barrel. In order to insure more economical operation, additional meters were installed to guide the firemen in securing the best combustion conditions.

GROUNDS

Due to labor shortage, which at times has been critical, many contemplated improvements had to be left until more help is available. Of the improvements noted below, the most important concern the Plaza of the Americas and areas north of the Plaza, where 4,400 square feet of cement walk were laid. Approximate cost	$ 750.00
The old cement walks from Fletcher Patio to the north entrance of Florida Union were widened and repaired; walks leading to the Cafeteria entrance were laid; and the ground in this area was graded and landscaped. Approximate cost	1,500.00
New cement seats were cast and placed on the campus grounds. Approximate cost	250.00
The ground was graded and landscaped around a new half-circle driveway to the west side of Murphree Hall. Approximate cost	1,000.00
The dirt roads around the Artillery Stables were repaired and resurfaced, and shrubs were planted around the Athletic fields. Approximate cost	250.00
Old walks were moved from the Newell Experiment Station grounds, tons of rubbish were removed, and new soil was hauled in to improve the ground for planting. Six large palms were moved and replanted on the north side and many new palms planted on the south side of the building. The ground was graded and shrubs and grass planted. Approximate cost	1,500.00
The lime rock driveway to the south entrance of P. K. Yonge Laboratory School was resurfaced, and cinders were placed on the running track. Approximate cost	200.00
The driveway to the Horticultural Garden, the roads to the Poultry Laboratory, Duplicating Department, and Hydraulic Laboratory were improved. Approximate cost	700.00

MILITARY PROPERTY

Attributed directly to the War Department requirements for prosecuting World War II, many changes and reductions were made in our ROTC. Advanced ROTC Military Training was discontinued for the duration. Owing to the small civilian enrollment, the number of basic military students was decreased. This automatically caused a great deal of the military training equipment, including all 75 mm guns and equipment, all machine guns and equipment, all Army horses, saddles, and harness equipment to be shipped away by order of the War Department.

CAFETERIA

In September, 1942, we began our military program with Officer Candidate School, No. 3, which had a total candidate enrollment of 600. We were paid on a per diem basis, and in this way could accommodate Army and civilian students by rearranging the meal schedule. It was, of course, necessary to increase the overhead very materially by an increased staff of dietitians and other employees. Beginning in February, 1943, we closed a contract with the 62nd College Training Detachment of the Air Forces to mess a maximum of 750 pre-pre-flight trainees. It was then necessary to eliminate all civilian students and feed only Army trainees: first, because of lack of space; and, second, because we fed them on a cost basis. The Florida Union Banquet Hall was used for an additional dining room by installing steam tables and other equipment. Also, the small wing dining room was utilized to capacity.

Our contract with the Officer Candidate School terminated in June, 1943, but at the same time we initiated a contract with the War Deparment for a unit of the Army Specialized Training Program with a maximum enrollment of 850 trainees. Due to the organization of these Army units we were able to feed approximately 1,600 trainees three times a day with a total seating capacity of 515.

New equipment and improvements purchased and installed included two gas ranges, one deep-fat frier, a slicing machine, one small dishwashing machine as a standby and 200 chairs and tables for the banquet hall. All dining room tables were covered with white inlaid linoleum. One range, the fat frier, and the slicing machine were replacements.

SODA FOUNTAIN

The Cafeteria and the Soda Fountain have been operated as a joint activity in charge of the Dietitian, with the Cafeteria furnishing all prepared food. When we converted the Cafeteria into an Army mess, it was necessary to eliminate our service to the Soda Fountain. Since that time, the Soda Fountain has been serving sandwiches, ice cream, cakes, etc., instead of providing the restaurant meal service previously offered. Very little equipment has been purchased for the Soda Fountain, but many repairs and improvements were made to meet Army standards.

BOOKSTORE

The University Bookstore, located in the Florida Union Annex, was used by the Army programs to handle all textbooks and training supplies. During this period the Bookstore handled approximately $75,000 worth of military textbooks, for which the Army paid a 5 per cent handling charge. It also continued to serve the few civilian students and to provide correspondence students with necessary equipment. However, the bulk of the business of the Bookstore was carried on with Army trainees.

DUPLICATING DEPARTMENT

The Duplicating Department, operating with Mr. G. T. Bond as Acting Manager, continues to serve the University and its auxiliary units at a considerable saving over what would be expended on printing bills. We have satisfactory equipment to do mimeographing, multigraphing, multilithing and ditto work for all departments of the University. The ASTP and AAF units on the campus

have had the benefit of this University facility, as well as instruction, housing, messing, etc., for the past several years. The bookkeeping system is adequate to take care of all records necessary for safeguarding the operations involved. This Department is entirely self-supporting and receives its income in the form of compensation for supplies, services as noted above, and photographic and bindery work, provided at a saving of more than 10 per cent to the various University departments. This work is carried on by eight full-time employees duly appointed and budgeted.

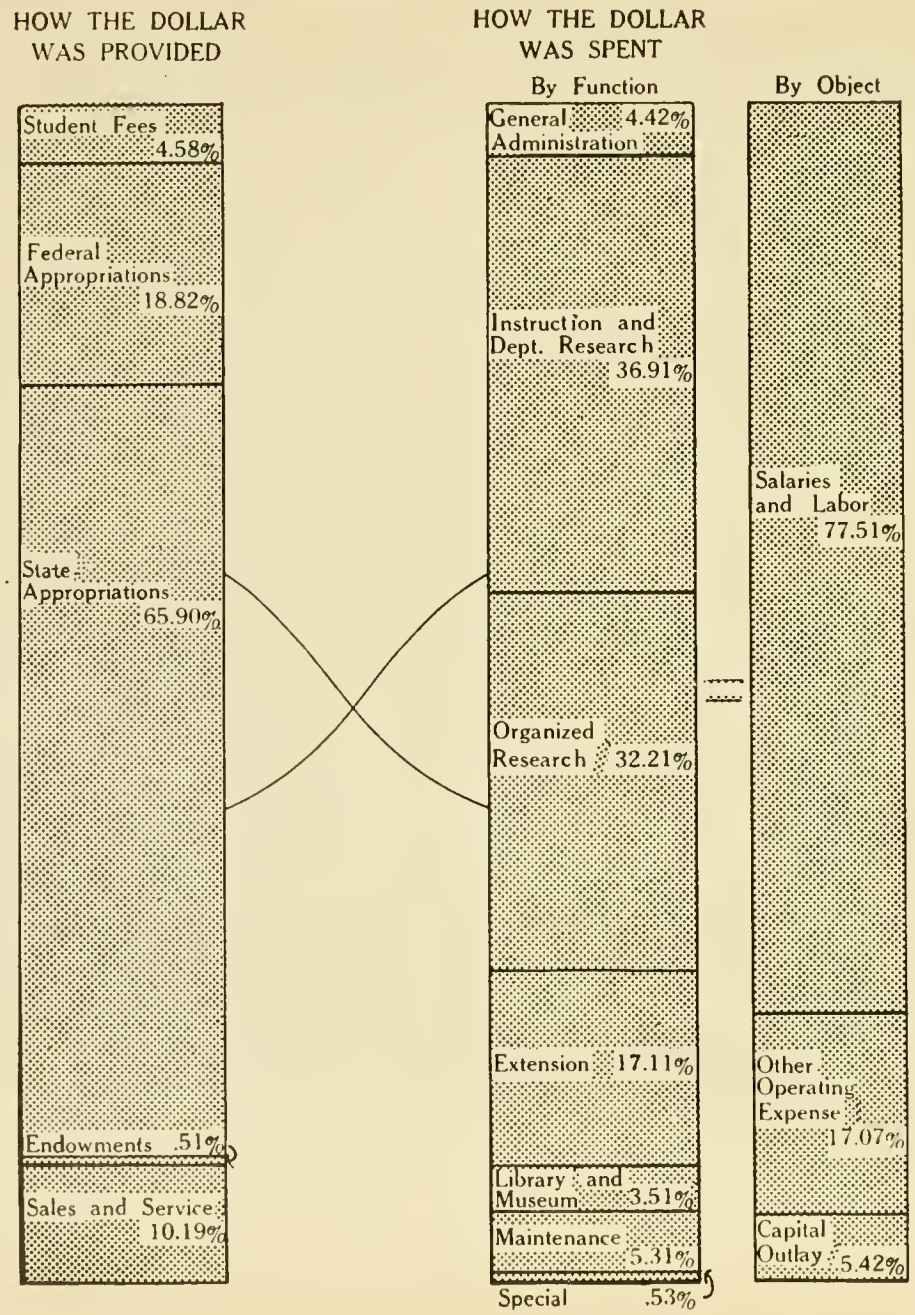
REPORT OF NON-EDUCATIONAL FUNDS
JULY 1, 1942 THROUGH JUNE 30, 1944

	Balances July 1, 1942	Debits	Credits	Balances June 30, 1944
AUXILIARY FUNDS				
Cafeteria and Soda Fountain	$ 16,065.81	$ 853,843.93	$ 852,205.81	$ 17,703.93
Dormitories—				
Thomas, Buckman and Sledd	9,317.76*	120,201.23	93,354.20	17,529.27
Fletcher		40,421.52	40,421.52	
Murphree		62,949.42	62,949.42	
Bonds	13,100.00			13,100.00
Room Reservations	11,750.50	12,155.00	19,785.00	4,120.50
Infirmary	10,212.12	60,966.18	65,115.13	6,063.17
Radio Station	2,070.83	105,673.68	76,784.92	30,959.59
Bookstore	1,852.33	161,100.74	159,459.00	3,494.07
P. K. Yonge Cafeteria	45.46*	35,131.13	32,375.55	2,710.12
TOTALS	$ 45,688.37	$1,452,442.83	$1,402,450.55	$ 95,680.65
AGENCY FUNDS				
Student Activity Funds	$ 9,427.92	$ 68,676.28	$ 75,512.11	$ 2,592.09
University Incidentals		926,021.81	926,021.81	
Station Incidentals		285,910.44	285,910.44	
ROTC Student Clothing Funds	886.45	1,644.56	2,001.44	529.57
Louis D. Beaumont	1,885.00		766.25	1,118.75
Laboratory Breakage	2,887.09	6,501.50	7,443.26	1,945.33
Pharmacy Professional Relations	55.48	7,184.05	6,168.76	1,070.77
Cash Deposit—Student Bank	26,872.87	435,486.48	450,376.65	11,982.70
Scholarships and Loans	10,558.23	88,235.02	81,004.30	17,788.95
Day Lily Research	311.00			311.00
Drug Research	117.56		1.08	116.48
ESMDTC—Federal Funds	12,185.48	51,786.97	63,972.45	
ESMWT—Federal Funds		227,837.51	190,891.82	36,945.69
ESMWT—Regional Advisor		4,704.35	3,177.61	1,526.74
Florida Agricultural Experiment Station Federal Funds	9,881.74	249,786.83	254,486.10	5,182.47
Swimming Pool and Locker	33.00	18,726.24	18,748.63	10.61
Sloan Project and Applied Economics	6,561.45	32,166.14	34,532.17	4,195.42
Civil Aeronautics Authority	1,388.20	49,211.05	40,454.54	10,144.71
Wood Products Laboratory	162.75		52.64	110.11
Florida Union Annex—Special Building Fund	13,999.15	17,140.00	29,788.91	1,350.24
Engineering Experiment Station	2,658.35	15,043.20	7,389.25	10,312.30
General Education Board—Library Fund		40,146.15	38,632.43	1,513.72
General Education Board—Work Simplification Project		5,000.00	2,692.96	2,307.04
General Education Board—Nutrition Project		25,000.00	18,683.90	6,316.10
Accounts Payable	30,559.00		30,559.00	
Murphree Memorial Fund	2,981.52	1,772.98		4,754.50
YMCA Furniture Fund	382.87		382.87	
OSRD Research Project 2453		57,096.22	84,914.93	27,818.71*
OPRD Project 7001			1,010.93	1,010.93*
U. S. Signal Corp Project 2509		5,000.00	5,830.39	830.39*
Victory Tax Account		2,987.82	2,987.82	
Withholding Tax Account		2,195.30	2,195.30	
Western Union Sub-Station Account		555.98	407.87	148.11
Florida Crippled Children Society		425.00		425.00
Inter-American Work Shop		650.00	650.00	
Florida Medical Association Post Graduate Course		38.00	38.00	
TOTALS	$ 133,795.11	$2,626,929.88	$2,667,686.62	$ 93,038.37
SPECIAL TRUST FUNDS				
Parsons Museum Fund	$ 623.18		$ 230.94	$ 392.24
TOTAL ALL FUNDS	$ 180,106.66	$4,079,372.71	$4,070,368.11	$ 189,111.26

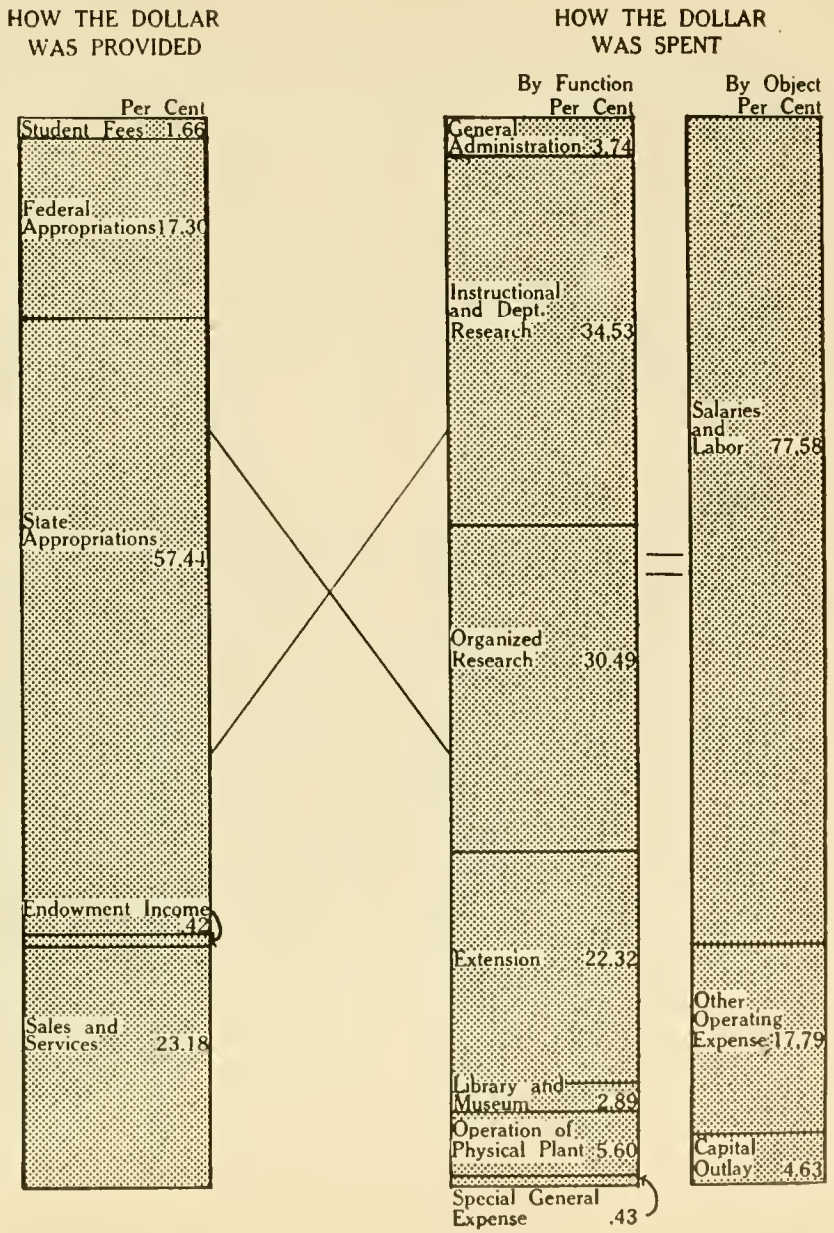
* Debit.

Respectfully submitted,

K. H. GRAHAM, *Business Manager*



The Operating Dollar 1943 - 44



UNIVERSITY OF FLORIDA
REPORT OF INCOME AND DISBURSEMENTS
1942-1944

	Balance 7-1-42	1942-43 Income	1942-43 Disbursements	Reverted 6-30-43	1943-44 Income	1943-44 Disbursements	Balance 6-30-44
STATE APPROPRIATIONS							
University of Florida:							
Salaries	$ 33.967.34	$ 783,090.00	$ 734,212.78	$ 82,844.56	$ 707,790.00	$ 702,924.38	$ 4,865.62
Necessary and Regular Expense	978.01	209,160.00	161,464.00	48,674.01	161,660.00	161,660.00	.....
Special Emergency Appropriation for Leaves of Absence	.....	.....	.....	.....	100,975.00	2,888.85	98,086.15*
Chair of Americanism	.....	2,500.00	2,498.41	1.59	2,500.00	2,495.01	4.99*
Department of Forestry—Chapter 17028	1,142.10	7,500.00	3,917.42	4,724.68	.....	.....	.....
School of Forestry—Chapter 18403	Dr. 245.64	25,000.00	23,416.09	1,338.27	.....	.....	.....
School of Forestry—Section 241.09	.....	.....	.....	.....	32,500.00	32,499.92	.08*
Agricultural College Fund—Chapters 5384 and 19137	.....	7,750.00	7,750.00	.....	7,750.00	7,750.00	.....
Radio Station WRUF							
Salaries	4,200.00	5,000.00	720.00	8,480.00	5,000.00	1,245.00	3,755.00
Necessary and Regular Expense	4,444.57	5,000.00	3,436.16	6,008.41	5,000.00	3,395.44	1,604.56
Special: Equipment for the Biennium	29,462.18	.....	10,695.55	18,766.63	.....	.....	.....
Florida Industrial and Engineering Experiment Station	.....	.....	.....	.....	20,000.00	4,013.69	15,986.31*
Total State Appropriations	$ 73,948.56	$1,045,000.00	$ 948,110.41	$170,838.15	$1,043,175.00	$ 918,872.29	$124,302.71
Less Balances Reverting 6-30-44	.....	.....	.....	.....	.....	.....	$114,077.53
Available Balance Carried Forward	.....	.....	.....	.....	.....	.....	$ 10,225.18
FEDERAL FUNDS							
Morrill-Nelson Fund	$	$ 25,000.00	$ 25,000.00	$	$ 25,000.00	$ 25,000.00	$ .....
Bankhead-Jones Fund	.....	20,827.55	20,827.55	.....	20,827.55	20,827.55	.....
Total Federal Funds	$	$ 45,827.55	$ 45,827.55	$	$ 45,827.55	$ 45,827.55	$ .....
ENDOWMENT FUNDS							
American Legion Interest Fund	$	$ 2,200.00	$ 2,200.00	$	$ 2,200.00	$ 2,200.00	$ .....
Seminary Interest Fund	.....	4,241.99	2,803.08	.....	3,098.05	2,839.30	1,697.66
Total Endowment Funds	$	$ 6,441.99	$ 5,003.08	$	$ 5,298.05	$ 5,039.30	$ 1,697.66
INCIDENTAL FUNDS							
University	$ 61,808.20	$ 263,993.70	$ 265,289.18	$	$ 588,104.51	$ 406,551.12	$242,066.11
General Extension Division	11,401.63	32,034.58	26,954.18	.....	40,460.76	30,625.44	26,317.35
Total Incidental Funds	$ 73,209.83	$ 296,028.28	$ 292,243.36	$	$ 628,565.27	$ 437,176.56	$268,383.46
OTHER FUNDS							
Alachua County Appropriation for P. K. Yonge School	$	$ 10,700.00	$ 10,700.00	$	$ 10,700.00	$ 10,700.00	$ .....

* Balance reverting 6-30-44.

UNIVERSITY OF FLORIDA
REPORT OF INCOME AND DISBURSEMENTS
1942-1944

	Balance 7-1-42	1942-43 Income	1942-43 Disbursements	Reverted 6-30-43	1943-44 Income	1943-44 Disbursements	Balance 6-30-44
BUILDING FUNDS							
Permanent Building Fund—Chapter 14573	$ 3,158.05	$ 1,566.80	$ 4,617.89	$	$	$	$ 106.96
Jno. F. Seagle Building Fund, Section 2, Chapter 18404	13,202.70	.....	1,544.50	.....	.....	862.92	10,795.28
Rehabilitation Agricultural Experiment Station Building—Chapter 20980	35,118.94	.....	35,113.41	5.53	.....	.....	.....
Total Building Funds	$ 51,479.69	$ 1,566.80	$ 41,275.80	$ 5.53	$	$ 862.92	$ 10,902.24
Total University Funds	$198,638.08	$1,405,564.62	$1,343,160.20	$170,843.68	$1,733,565.87	$1,418,478.62	$405,286.07
Less State Appropriations Reverting	.....	.....	.....	.....	.....	.....	$114,077.53
Net Balance	.....	.....	.....	.....	.....	.....	$291,208.54

FLORIDA AGRICULTURAL EXPERIMENT STATIONS
REPORT OF INCOME AND DISBURSEMENTS
1942-1944

STATE APPROPRIATIONS							
Main Experiment Station							
Salaries	$ 7,563.82	$ 126,803.00	$ 134,665.29	$ 301.53	$ 171,030.37	$ 171,030.37	$ .....
Necessary and Regular Expense	4,856.51	120,996.00	115,940.51	9,912.00	73,365.00	73,365.00	.....
Vegetable Crops Laboratory							
Salaries	3,475.60	11,860.00	9,379.31	5,956.29	19,412.00	18,385.39	1,026.61
Necessary and Regular Expense	578.04	13,140.00	12,654.18	1,063.86	14,255.55	14,001.59	253.96
Gladioli Investigations							
Salaries	2,600.00	3,600.00	6,111.65	88.35	3,600.00	3,105.62	494.38
Necessary and Regular Expense	81.65	1,400.00	1,085.32	396.33	1,400.00	1,115.39	284.61
Strawberry Investigations							
Salaries	1,415.00	4,800.00	4,800.00	1,415.00	4,800.00	3,800.00	1,000.00
Necessary and Regular Expense	94.05	1,500.00	394.56	1,199.49	1,500.00	683.48	816.52
Potato Investigations Laboratory							
Salaries	42.63	7,800.00	7,842.63	.....	9,208.00	9,208.00	.....
Necessary and Regular Expense	2.52	4,200.00	3,722.52	480.00	2,792.00	2,792.00	.....
Celery Investigations							
Salaries	492.87	10,200.00	8,141.05	2,551.82	11,004.00	7,422.04	3,581.96
Necessary and Regular Expense	.....	4,800.00	4,200.00	600.00	3,996.00	3,996.00	.....
Citrus Experiment Station							
Salaries	4,568.57	43,048.00	40,154.48	7,462.09	39,268.00	37,523.72	1,744.28
Necessary and Regular Expense	3,571.72	28,402.00	22,958.21	9,015.51	27,562.00	26,494.13	1,067.87
Everglades Experiment Station							
Salaries	57.48	33,928.00	33,985.48	.....	35,026.00	35,026.00	.....
Necessary and Regular Expense	2.00	20,072.00	17,914.00	2,160.00	13,646.00	13,646.00	.....
Continuing Fund—Chapter 8442	.....	5,000.00	5,000.00	.....	5,000.00	5,000.00	.....
Building and Laboratory	25,000.00	25,000.00	.....	50,000.00	.....	.....	.....

UNIVERSITY OF FLORIDA
REPORT OF INCOME AND DISBURSEMENTS
1942-1944

	Balance 7-1-42	1942-43 Income	1942-43 Dis-bursements	Reverted 6-30-43	1943-44 Income	1943-44 Dis-bursements	Balance 6-30-44
North Florida Experiment Station							
Salaries	42.23	17,868.00	17,910.23	.....	13,348.00	13,348.00	.....
Necessary and Regular Expense	.....	15,232.00	13,908.00	1,324.00	13,548.00	13,548.00	.....
Sub-Tropical Experiment Station							
Salaries	68.18	18,132.00	18,103.23	96.95	14,676.00	13,727.22	948.78
Necessary and Regular Expense	.....	2,868.00	2,028.00	840.00	8,524.00	8,524.00	.....
Watermelon and Grape Investigations							
Salaries	2.08	9,240.00	4,206.30	5,035.78	9,956.00	5,340.51	4,615.49
Necessary and Regular Expense	.....	4,260.00	3,720.00	540.00	6,344.00	6,344.00	.....
Weather Forecasting Service							
Salaries	.....	1,200.00	1,016.13	183.87	2,400.00	1,714.80	685.20
Necessary and Regular Expense	5,932.05	18,800.00	12,647.10	12,084.95	17,600.00	13,807.15	3,792.85
Ornamental Horticulture							
Salaries	6,000.00	6,000.00	.....	12,000.00	.....	.....	.....
Necessary and Regular Expense	4,000.00	4,000.00	.....	8,000.00	.....	.....	.....
Range Cattle Station							
Salaries	709.46	5,400.00	6,109.46	.....	5,400.00	5,400.00	.....
Necessary and Regular Expense	2.64	7,100.00	6,612.64	490.00	7,100.00	7,100.00	.....
State Soil Conservation	3,765.11	10,000.00	8,633.72	5,131.39	.....	.....	.....
Emergency Appropriation	2,610.85	10,000.00	.....	12,610.85	10,000.00	.....	10,000.00*
Special Vegetable Crops Laboratory Greenhouse (Biennium)	3,544.96	.....	.....	3,544.96	.....	.....	.....
Special Vegetable Crops Laboratory—Plant Pathology and Entomology	3,661.56	10,000.00	11,661.56	2,000.00	.....	.....	.....
North Florida Mobile Units—Chapter 20983	3,097.63	50,000.00	14,471.09	38,626.54	.....	.....	.....
North Florida Mobile Units							
Salaries	.....	.....	.....	.....	15,000.00	6,915.77	8,084.23*
Necessary and Regular Expense	.....	.....	.....	.....	15,000.00	12,940.65	2,059.35*
Soil Survey							
Salaries	.....	3,000.00	.....	3,000.00	3,000.00	3,000.00	.....
Necessary and Regular Expense	.....	2,000.00	.....	2,000.00	2,000.00	2,000.00	.....
Total State Appropriations	$ 87,839.21	$ 661,649.00	$ 549,376.65	$200,111.56	$ 580,760.92	$ 540,304.83	$ 40,456.09
Less Balances Reverting 6-30-44	.....	.....	.....	.....	.....	.....	$ 20,143.58
Net Balance	.....	.....	.....	.....	.....	.....	$ 20,312.51
FEDERAL FUNDS							
Hatch Fund	.....	15,000.00	15,000.00	.....	15,000.00	15,000.00	.....
Adams Fund	.....	15,000.00	15,000.00	.....	15,000.00	15,000.00	.....
Purnell Fund	.....	60,000.00	60,000.00	.....	60,000.00	60,000.00	.....
Bankhead-Jones Fund	.....	34,782.16	34,782.16	.....	34,782.16	34,782.16	.....
Total Federal Funds	.....	$ 124,782.16	$ 124,782.16	.....	$ 124,782.16	$ 124,782.16	.....

* Balance reverting 6-30-44.

UNIVERSITY OF FLORIDA
REPORT OF INCOME AND DISBURSEMENTS
1942-1944

	Balance 7-1-42	1942-43 Income	1942-43 Dis-bursements	Reverted 6-30-43	1943-44 Income	1943-44 Dis-bursements	Balance 6-30-44
INCIDENTAL FUNDS							
Station Incidental Fund (All Stations)	$ 94,711.03	$ 133,001.38	$ 63,061.91	.....	$ 148,410.53	$ 150,167.99	$162,893.04
Everglades Station Incidental Fund	8,852.60	.....	.....	.....	.....	.....	8,852.60
Total Incidental Funds	$103,563.63	$ 133,001.38	$ 63,061.91	.....	$ 148,410.53	$ 150,167.99	$171,745.64
Total Experiment Station Funds	$191,402.84	$ 919,432.54	$ 737,220.72	$200,111.56	$ 853,953.61	$ 815,254.98	$212,201.73
Less State Appropriations Reverting	.....	.....	.....	.....	.....	.....	$ 20,143.58
Net Balance	.....	.....	.....	.....	.....	.....	$192,058.15
AGRICULTURAL EXTENSION SERVICE REPORT OF INCOME AND DISBURSEMENTS 1942-1944							
STATE APPROPRIATIONS							
Offset for Federal Funds							
Salaries	$ 989.20	$ 60,980.00	$ 51,375.90	$ 10,593.30	$ 67,980.00	$ 67,980.00	$ .....
Necessary and Regular Expense	10,925.88	47,820.00	36,751.01	21,994.87	40,820.00	35,233.58	5,586.42
Continuing Appropriation—Chapter 19216	.....	.....	.....	.....	25,000.00	12,834.85	12,165.15*
Total State Appropriations	$ 11,915.08	$ 108,800.00	$ 88,126.91	$ 32,588.17	$ 133,800.00	$ 116,048.43	$ 17,751.57
Less Funds Reverting 6-30-44	.....	.....	.....	.....	.....	.....	$ 12,165.15
Net Balance	.....	.....	.....	.....	.....	.....	$ 5,586.42
FEDERAL FUNDS							
Capper-Ketcham Fund	$ 545.62	$ 26,872.10	$ 27,417.72	$	$ 27,417.72	$ 27,417.72	$ .....
Smith-Lever-Bankhead-Jones Fund	2,807.27	197,982.40	200,789.67	.....	200,653.07	200,653.07	.....
Emergency Farm Labor Program	.....	115,000.00	2,677.43	.....	100,000.00	178,702.41	33,620.16
Emergency War Food and Conservation	.....	.....	.....	.....	25,000.00	20,039.66	4,960.34
Total Federal Funds	$ 3,352.89	$ 339,854.50	$ 230,884.82	$	$ 353,070.79	$ 426,812.86	$ 38,580.50
Total Agricultural Extension Service Funds	$ 15,267.97	$ 448,654.50	$ 319,011.73	$ 32,588.17	$ 486,870.79	$ 542,861.29	$ 56,332.07
Less State Appropriations Reverting	.....	.....	.....	.....	.....	.....	$ 12,165.15
Net Balance	.....	.....	.....	.....	.....	.....	$ 44,166.92

* Balance reverting 6-30-44.

REPORT OF THE REGISTRAR

To the President of the University:

SIR: As Registrar of the University of Florida, I have the honor to submit the following report for the regular sessions, 1942-43, 1943-44 and the Summer Sessions, 1943 and 1944. During the period, the University carried on the College Training Program of the Army Air Forces, maintained a unit of the Army Specialized Training Program and conducted a short program for former ROTC students of the University, who were attached to the ASTP unit for a short period during the academic year, 1943-44. Because none of these programs coincided as to instructional periods with each other or with the regular civilian program, it is necessary to report enrollments for each of the programs separately.

Table I. CIVILIAN ENROLLMENTS

A. Enrollment by Colleges and Schools for the Regular Sessions, 1942-43 and 1943-44.

	1942-43	1943-44
College of Agriculture	112	16
School of Architecture and Allied Arts	27	6
College of Arts and Sciences	194	42
College of Business Administration	166	17
College of Education	44	6
College of Engineering	151	58
School of Forestry	20	....
General College	1,884	464
Graduate School	72	60
College of Law	57	26
School of Pharmacy	26	13
	2,753	708
Less Duplicates	43	17
NET TOTAL ENROLLMENT	2,710	691

B. Enrollment by Schools and Colleges for the Summer Sessions, 1943 and 1944.

1. SUMMER SESSIONS AT GAINESVILLE

	1943			1944		
	1st Term	2nd Term	Total	1st Term	2nd Term	Total
College of Agriculture	15	11	26	4	0	4
School of Architecture and Allied Arts	3	0	3	4	0	4
College of Arts and Sciences	38	31	69	25	22	47
College of Business Administration	13	15	28	10	8	18
College of Education	140	107	247	141	88	230
College of Engineering	56	50	106	21	19	40
School of Forestry	1	1	2	1	0	1
General College	289	272	561	260	245	505
Graduate School	80	70	150	97	70	168
College of Law	13	14	27	22	18	40
School of Pharmacy	6	1	7	0	1	1
Unclassified	82	60	142	122	64	187
	736	632	1,368	707	535	1,245
Less Duplicates			492			405
Number of Individuals Enrolled at Gainesville			876			840

2. TRADE AND INDUSTRIAL SCHOOL AT DAYTONA BEACH

	1943 1st Term	1943 2nd Term	1943 Total	1944 1st Term	1944 2nd Term	1944 Total
Undergraduates	68	88	156	87	94	181
Graduates	10	10	20	12	9	21
	78	98	176	99	103	202
Less Duplicates			19			45
Number of Individuals Enrolled at Daytona Beach			157			157

3. RECAPITULATION OF SUMMER SESSION ENROLLMENTS

	1943	1944
Individuals Registered at Gainesville	876	840
Individuals Registered at Daytona Beach	157	202
	1,033	1,042
Less Duplicates	1	....
NET TOTAL INDIVIDUALS REGISTERED	1,032	1,042

Table II. ENROLLMENT IN ARMY AIR FORCES COLLEGE TRAINING DETACHMENT

February 26, 1943 - June 30, 1944

Date	Admitted	Withdrawals
February, 1943	743	0
March, 1943	9	5
April, 1943	0	4
May, 1943	153	152
June, 1943	0	154
July, 1943	153	306
August, 1943	302	152
September, 1943	326	155
October, 1943	150	150
November, 1943	151	153
December, 1943	150	151
January, 1944	86	153
February, 1944	150	150
March, 1944	300	150
April, 1944	149	408
May, 1944	139	194
June, 1944	0	524
TOTAL	2,961	2,961

Table III. ENROLLMENT IN THE ARMY SPECIALIZED TRAINING PROGRAM

June 13, 1943 - June 30, 1944

Curriculum	Term 1	2	3	4A	4	5	6	7	Total for Curriculum
Introductory Curriculum (N 20)	27								27
Introductory Curriculum (N 30)		24							24
Basic Curriculum (B 60)	60	34							94
Basic Engineering 1	903	289	136						1,328
Basic Engineering 4	60	32							92
Pre-Professional			44		43	27			114
Chemical Engineering					19	13	12		44
Civil Engineering				66	86	62	52	20	286
Electrical Engineering				84	103	59	19		265
Mechanical Engineering				61	81	79	57	25	303
Total for Term or Cycle	1,050	379	180	211	332	240	140	45	
GRAND TOTAL									2,577
Less Duplicates									1,082
Total Number of Individuals Enrolled Throughout ASTP									1,495

Table IV. ENROLLMENT IN ROTC - ASTP

October, 1943 - April, 1944

College of Agriculture	22
School of Architecture and Allied Arts	2
College of Arts and Sciences	25
College of Business Administration	24
College of Education	5
College of Engineering	12
School of Forestry	1
General College	13
School of Pharmacy	1
TOTAL ENROLLMENT	105

Table V. ENROLLMENT IN THE UNIVERSITY OF FLORIDA FROM 1905 TO 1944

Regular Session	Number Enrolled	Summer Term	Number* Enrolled	Total
1905-06	135	.....	.....	135
1906-07	102	.....	.....	102
1907-08	103	.....	.....	103
1908-09	103	.....	.....	103
1909-10	186	.....	.....	186
1910-11	241	.....	.....	241
1911-12	302	.....	.....	302
1912-13	321	1913	140	461
1913-14	361	1914	269	630
1914-15	395	1915	402	797
1915-16	447	1916	539	986
1916-17	460	1917	434	894
1917-18	421	1918	434	855
1918-19	554	1919	612	1,166
1919-20	664	1920	743	1,407
1920-21	823	1921	783	1,606
1921-22	1,002	1922	895	1,897
1922-23	1,183	1923	1,028	2,211
1923-24	1,347	1924	944	2,291
1924-25	1,488	1925	987	2,475
1925-26	1,860	1926	908	2,768
1926-27	1,968	1927	1,269	3,237
1927-28	2,073	1928	1,686	3,759
1928-29	2,270	1929	1,613	3,883
1929-30	2,257	1930	1,480	3,737
1930-31	2,388	1931	1,530	3,918
1931-32	2,558	1932	1,746	4,304
1932-33	2,628	1933	1,086	3,714
1933-34	2,371	1934	1,310	3,681
1934-35	2,848	1935	1,602	4,450
1935-36	2,983	1936	1,706	4,689
1936-37	3,069	1937	2,136	5,205
1937-38	3,278	1938	2,631	5,909
1938-39	3,438	1939	2,591	6,029
1939-40	3,456	1940	2,805	6,261
1940-41	3,438	1941	2,622	6,060
1941-42	3,239	1942	2,625†	5,864
1942-43**	2,710	1943	1,032	3,742
1943-44**	691	1944	1,042	1,733

* These figures include the enrollment in the demonstration school, except for the Summer Sessions of 1933 and after.

** The figures given are for civilian enrollment only. In addition to enrollments shown in the table during the period from March, 1943, to December, 1944, 2,961 trainees were given from 3 to 5 months' instruction for the Army Air Forces and 1,495 trainees were given from 3 to 15 months' instruction under the Army Specialized Training Program.

† Includes 379 students registered in the September, 1942, inter-session.

Table VI. DIPLOMAS, CERTIFICATES AND DEGREES CONFERRED SINCE 1905

	No. Diplomas and Certificates	Bacca-laureate	Profes-sional	Masters'	Doctors'	Honorary Degrees
*1905-1938	1,730	5,054	53	467	23	21
1938-39	446	408	....	22	2	2
SS 1939	122	166	....	47	....	....
1939-40	457	437	....	22	1	....
SS 1940	83	170	....	41	3	....
1940-41	452	488	2	33	4	2
SS 1941	71	187	....	41	1	....
1941-42	381	386	1	22	4	2
SS 1942	116	140	....	17	2	....
1942-43	170	337	....	15	4	....
SS 1943	33	110	....	27	1	....
1943-44	39	102	....	11	....	3
SS 1944	16	69	....	24	....	....

* For distribution by years see the Biennial Report for the biennium ending June 30, 1938.

** In the column headed "Diplomas and Certificates" is grouped the number of all awards made upon the completion of curricula of less than four years duration.

During the biennium there has been considerable turnover in the personnel of the staff of the Registrar's Office, which has made quite difficult the work of scheduling sometimes as many as four separate programs, none of which coincided as to beginning and ending dates; conducting registrations for these programs, often as frequently as every three weeks; preparing the numerous reports required by the War Department and maintaining records of the trainees in accordance with War Department regulations. Mr. Stanley E. Wimberly, Assistant Professor of Psychology, was assigned half time to the Registrar's Office at the beginning of the participation in the war training programs. His services as Acting Assistant Registrar were of great value. He is at present on leave, completing the work for his doctorate at the University of Michigan.

The most pressing need of the Registrar's Office is additional space to provide for adequate filing of student records. If possible, space should be assigned which would afford some measure of fire protection, inasmuch as more than two-thirds of the records are now filed in a manner that offers no protection against fire.

Respectfully submitted,

R. S. Johnson, *Registrar*

REPORT OF THE ACTING UNIVERSITY EXAMINER

To the President of the University:

Sir: During the biennium ending June 30, 1944, the Board of University Examiners has maintained all of its essential peacetime activities, which are described in the biennial report for June 30, 1942, and which, therefore, need not be repeated here.

In addition, the Board rendered extensive testing service to the several mili-

tary units on the campus. The Board performed much the same function for the Army Specialized Training Program and the Army Air Forces College Training Detachment as it does for the General College, thus providing a more accurate system of evaluation of students' work and saving a hard-pressed instructional staff valuable time. This service included the preparation of some 250 tests, the mimeographing of approximately 50,000 test booklets, and the scoring of approximately 107,000 answer sheets. The Board also scored and analyzed about 18,000 answer sheets for the Officer Candidate School.

The work of the Board during the past biennium has probably been the heaviest in its history, the reduction in volume brought about by the decrease in civilian enrollment having been more than offset by the work for the military units. Altogether, during the biennium the Board prepared 521 tests and examinations, produced 97,838 test booklets, assigned 48,936 final grades, and scored 251,090 answer sheets.

Returning veterans will present a difficult problem, both in guidance and in evaluation of credits, because of the varied training they received while in the armed forces. The Board expects to render a special service in this respect by undertaking an extensive program of placement and diagnostic examinations for these men.

Respectfully submitted,

W. E. Moore, *Acting University Examiner*

REPORT OF THE DEAN OF THE GRADUATE SCHOOL

To the President of the University:

Sir: I beg to submit the following report of the activities of the Graduate School for the biennium ending June 30, 1944.

During the war, the enrollment in the Graduate School has held up better than might have been expected. The lowest registration was reached in 1942, when 40 graduate students enrolled each semester of the regular year. The first term of the 1944 Summer School showed a registration of 97 students, an increase of about 28 per cent over the previous summer. A total of 70 master's and 7 doctor's degrees was conferred during the period. Throughout the biennium, we operated on a diminished budget with a reduction in the amount spent for research and for graduate council assistantships.

In the spring of 1944, the Graduate Council made a study of the problem of the master's degree. As a result of this study, we inaugurated a new degree, Master of Education, designed to meet the needs of in-service teachers.

The School of Trade and Industrial Education at Daytona Beach offered only two three-week terms in each of the summers of 1943 and 1944. Previously, it had offered three terms each summer. Ten to twelve graduate students were registered. A Short Course for Doctors of Medicine has been given in Jacksonville each year in June under the auspices of the Florida Medical Association, the State Board of Health, and the Graduate School of the University of Florida. These courses have been very successful, attracting from 150 to 200 physicians through a carefully worked out program of lectures by eminent specialists. In cooperation with the General Extension Division, the Graduate School has provided a special service to teachers in Jacksonville during the emergency. A

graduate course in Education was offered in the spring of 1943, the fall of 1943, and the spring of 1944.

Graduate research funds provided necessary X-ray equipment for biology, motion picture films for psychology, library material, and books and periodicals, for all departments offering graduate work.

There is a close integration of the Graduate Council with the Research Council. Promotion of research by encouragement and aid to exceptional graduate students should continue to be an important part of our program. It is highly important to offer to such students inducements in the form of graduate assistantships and research fellowships, which will encourage superior students to pursue advanced work and independent research.

Respectfully submitted,

T. M. SIMPSON, *Dean*

REPORT OF THE DEAN OF THE COLLEGE OF ARTS AND SCIENCES

To the President of the University:

SIR: I submit herewith the following report on the activities of the College of Arts and Sciences, including the School of Pharmacy, for the biennium ending June 30, 1944.

CURRICULAR REVISIONS

The College maintains a Curriculum Committee, whose duties comprise in part the study of proposed changes in course offerings requested by the different departments and the recommendation of action to be taken on them. The College also has a special committee on Educational Policy and Program. This committee is concerned chiefly with the fundamental trends in modern liberal arts education. From time to time it reports its recommendations to the faculty for consideration. During the past two years, various curricular improvements have been effected, after careful consideration, in order to meet the needs of a better educational program. Only the more important advancements will be recorded here.

The correlation of certain of our courses with those of other colleges on the campus appears to have been solved. In keeping with the University's interest in Latin-American culture, a course in elementary Portuguese has been initiated. The future development and the introduction of other modern language courses will be kept in mind. Some courses in physics have been revised and strengthened, and special improvements of benefit to electrical engineering students have been made in this subject.

There have been no sweeping curricular revisions in the courses offered by some of the departments. In certain departments studies of the advisability of increasing the course offerings are being made.

IMPORTANT PROBLEMS AND PROJECTS

Anticipating the return of those students who entered the armed services short of graduation and of other ex-service men, we are making plans to facilitate the instruction of these men as well as of younger men. This instruction will be primarily concerned with speed, flexibility, and individual course requirements. However, studies are also being made of other specific problems.

A special committee is now planning closer cooperation among the existing guidance agencies of the University in order to render the most efficient service possible to veterans and other students. A coordinating committee representing the College of Arts and Sciences and the College of Education is making a critical study of the psychology offerings in both colleges with a view to advancing teacher-training and other phases of that subject. The Committee on Educational Policy and Program is making a comprehensive study for the purpose of better integrating the educational relationship of the College with the College of Education as a whole, which should be of especial benefit to the students of education. Discussions now under way will, we hope, result in the expansion of courses in sociology which are basic to the training in social administration. The success of this expansion will entail the employment of a staff member trained and experienced in the field of social administration.

Counseling with students has been exceedingly difficult during the biennium because of unsettled and changing conditions. It is to be hoped that we can strengthen our counseling and guidance service, particularly for those who will be undertaking the difficult transition from participation in the war to life on the campus.

NEW FACILITIES

As a result of acquisitions during the war training programs, the equipment for instruction in elementary laboratory courses in physics has been increased. We are regularly adding to the equipment of the Speech Clinic. The most important recent addition to the Clinic is the audiometer. Preparing to utilize visual aid in journalism instruction where it may be of inestimable value, we have lately added to the Department of Journalism a Spee-Dee duplicator for reproduction of forms and material useful in advertising and editing courses. The Department of Chemistry has acquired such new equipment as turbidimeters, apparatus for potentiometric determination of hydrogen in concentration, and catalytic reaction chambers and distillation columns, including microcolumns.

FACULTY PERSONNEL AND WAR ACTIVITIES

To give a detailed account of the accomplishments of all the members of the College faculty would require too much space. They have carried on in a satisfactory degree their normal scholarly interests in spite of the extraordinarily trying conditions under which they have worked. They have been active in research, in the publication of articles and reviews, and in the editing of learned journals. They have served as consultants and attended meetings of scientific and other professional societies, have held offices in national and State organizations, and have engaged in many other educational pursuits, as well as rendering valuable assistance to the war effort.

Seventeen members of the staff are now on leave of absence serving in the armed forces or rendering highly specialized services directly to the war effort. Many of those who have remained on the campus have devoted much time to the development and teaching of courses in the war training programs. Others have contributed to the war effort through service with the following organizations: Local Board No. 2, Alachua County Selective Service, the Alachua County War Price and Rationing Board, the Defense Training Schools of the county, the Office of Scientific Research and Development, the Speakers' Bureau of the Alachua County War Finance Committee, the State Defense Council, and

the Speakers' Bureau of the Alachua County Chapter of the American Red Cross.

The Director of the Bureau of Vocational Guidance and Mental Hygiene has received national recognition for his clinical work in the Bureau by being appointed a member of the Committee on Clinics of the American Association of Applied Psychologists, which establishes standards for psychological clinics in this country.

Dr. Elmer E. Frahm resigned his position as Associate Professor of Agricultural Chemistry on April 1, 1944. His work for the remainder of the semester was assumed by other members of the staff. J. E. Johnson, Professor of Bible, passed away on November 24, 1943. He served the College with distinction and will be greatly missed. Dr. L. M. Bristol, as his special assignment for the remainder of the academic year, took charge of the classes formerly taught by Professor Johnson. Eleven members of the faculty were promoted in rank during the biennium.

The immediate postwar period will entail readjustments in the lives of the people of Florida, in which the Department of Sociology can make a constructive contribution through extension and research activities. This will be possible through the allotment to sociology of an increase in its staff. By this addition to the instructional force, we shall also be able to develop the training contemplated in social administration.

It is recommended that the facilities of the Bureau of Vocational Guidance and Mental Hygiene be extended in order to serve more effectively in the vocational rehabilitation work of returning veterans.

The Naval Stores Research Project has been considerably handicapped by the turnover in personnel of properly trained men. However, definite progress has been made on some of the problems under study. It is recommended that the present organization remain intact even though it may not be possible to fill the assistantships until the emergency has passed.

It is urgently recommended that the proposed budget of the College, including the School of Pharmacy, for the ensuing biennium be approved. The recommendations are based on several hundred pages of factual information collected and studied by the Equity Committee and the Dean.

SCHOOL OF PHARMACY

No changes were made in the curriculum although the subject matter in most courses was revised in accordance with scientific advances. The need for trained pharmacists caused the Selective Service System to defer the drafting of some pharmacy students, thus maintaining enrollment at a relatively high level during the early part of the biennium.

The Bureau of Professional Relations was continued by a grant of $7,000 from the Florida State Board of Pharmacy. Approximately 100,000 pieces of literature are mailed annually to all drug stores and physicians in Florida. Requests for literature come from almost every state. Exhibits have been presented before two graduate short courses for doctors of medicine.

New facilities include the addition of several journal sets to the Library and new pieces of research equipment. The Medicinal Plant Garden was improved by adding: (1) a medicinal aboretum with a central group of camphor trees to be dedicated to the founders of the School of Pharmacy; (2) more herbs and flowering plants; and (3) a sun-dial which was a gift from the Kirby-Smith Chapter of the United Daughters of the Confederacy.

Only one change occurred in faculty personnel, which was the resignation of the Associate Director of the Bureau of Professional Relations to enter the armed services.

Recommendations for improvement include a practice drug store, more laboratory space, and enlarged animal quarters. The Medicinal Plant Garden needs a summer supervisor and a sprinkling system. The collection of native medicinal plants should be increased. Whenever graduate work returns to its prewar level, an additional instructor should be employed.

Respectfully submitted,

TOWNES R. LEIGH, *Dean*

REPORT OF THE PROVOST FOR AGRICULTURE

To the President of the University:

SIR: I submit herewith the reports of the three divisions of the College of Agriculture, namely, Resident Teaching, the Agricultural Experiment Station, and the Agricultural Extension Service. The report of the School of Forestry and of the Conservation Reserve for the biennium ending June 30, 1944, is also included.

Respectfully submitted,

H. HAROLD HUME, *Provost for Agriculture*

REPORT OF THE DEAN OF THE COLLEGE OF AGRICULTURE

To the President of the University:

SIR: For the biennium ending June 30, 1944, the following report for the Teaching Division of the College of Agriculture, the School of Forestry, and the Conservation Reserve is respectfully submitted.

During the biennium there has been a gradual reduction in the number of students registered in the College of Agriculture. Many students already in attendance and others in prospect have been taken into the armed services.

In addition to caring for the needs of the few students in residence, the members of the faculty of the College of Agriculture have assisted in teaching such subjects as geography, mathematics, and physics to various groups of trainees at the University. All have been fully employed, and many have carried work loads heavier than they should have. As most of the faculty are in the older age group, the number called for military service has been small. H. G. Hamilton, Professor of Marketing, has been on leave with the Bureau of Agricultural Economics, United States Department of Agriculture, and is assisting in the distribution of agricultural products. Douglas J. Smith, Assistant Professor of Animal Husbandry, has joined the United States Army, as also has J. E. Pace, who had replaced him on temporary appointment. John V. Watkins, Assistant Professor of Horticulture, resigned to take up commercial work. E. E. Frahm, Assistant Professor of Agricultural Chemistry, resigned to accept a position in another institution at an increased salary. P. H. Senn, Head

Professor of Agronomy, has assisted the Agricultural Extension Service in carrying through the State Labor Program.

Curricula of the College have been carefully reviewed in preparation for the increased enrollment that is expected when war ceases. Attention has been given to equipment and facilities in order to keep the laboratories and other essentials for instruction up-to-date.

A two-year curriculum to meet the needs of returning soldiers has also been worked out. The College of Agriculture is well prepared to meet the requirements of service men interested in pursuing careers in agriculture after they return to civilian life.

SCHOOL OF FORESTRY

The School of Forestry has adjusted itself to the wartime schedule. The 1942 Summer Camp was held on forest lands of private ownership wherein the required field training was combined with a practical land survey and timber cruise of much value to the war program. The Director of the School was authorized to cooperate during the 1942 summer season with a large cork company in furthering its timber war program in the South. During 1942-43 the ROTC students who were retained on the campus afforded candidates for graduation that year, but since then the Forestry Club and similar organizations have ceased their activities for the duration. Some courses in forestry have been continued for the ROTC contingent detailed here during the fall session and for the civilian students. Otherwise, the resident teaching faculty has been employed either full-time or part-time in teaching mathematics and civil air regulations to Air Corps trainees; in handling food preservation tests for the Quartermaster General's Office, Washington, D. C.; and in conducting special research.

Some members of the teaching staff have received leaves of absence to serve in the United States Armed Forces or to enter government service. P. W. Frazier, Assistant Professor of Forestry, is a Captain in the Quartermaster Corps, and W. B. DeVall, Instructor in Forestry, is filling the position of Project Forester, District No. 3, for the Timber Production War Project. E. A. Ziegler, Professor of Forestry, is Industrial Specialist and Head of the Timber Production Section of the War Production Board. These men will probably be absent for the duration of the war.

Research has been continued, insofar as it is compatible with the personnel shortage, at the Austin Cary Demonstration Forest, the Welaka Conservation Reserve, and the Wood Products Laboratory. Problems in Silviculture and Forest Utilization have been given precedence in the program. Salvage cuttings and thinnings of pulpwood upon the forests have contributed at least in a small way to the timber production requirements of the war. In the meantime, the School has coordinated its postwar planning with that of related forest agencies in Florida and other parts of the South.

During the biennium, construction of the Forest Products Laboratory was completed.

The School was accredited by the Society of American Foresters in 1943.

UNIVERSITY OF FLORIDA CONSERVATION RESERVE

The Conservation Reserve was placed on a purely maintenance basis. Buildings and equipment have been kept in good condition against the time when they will be used again by students. A splendid record for fire protection has

been established through the active assistance of the employees on the Reserve, and a pine tree planting program of 10,000 seedlings yearly has been carried out with satisfactory results. The condition of the forest growth on the property is excellent.

W. M. Dunson, Superintendent in Charge, is in the United States Army. During his absence, Mrs. Katherine L. Jacobson has carried on most satisfactorily.

Respectfully submitted,

H. Harold Hume, *Dean*

REPORT OF THE DIRECTOR OF THE AGRICULTURAL EXPERIMENT STATIONS

To the President of the University:

Sir: I respectfully submit the following report of the University of Florida Agricultural Experiment Stations for the biennium ending June 30, 1944.

During the past biennium, the objectives of the research conducted under 175 projects by the 8 departments of the Main Experiment Station, the 5 branch stations and the 6 field laboratories were to obtain findings which would be of utmost assistance in the maximum production of food, feed, and other plant materials for the all-out war program. The results of these researches may perhaps be best evaluated by Florida's agricultural production, which has exceeded by far that of any previous similar period, and which has met all production goals. These results came from many different lines of investigation, including cultural and management practices of numerous agronomic and horticultural crops; control of animal and plant pests with emphasis on substitute fungicides and insecticides; identification and correction of soil deficiences which affect plants and livestock; nutritive values of foods and nutrition of rural children; economic plant and animal breeding programs for adaptability and quality; livestock management practices; new plant introductions and experimental plantings of rubber producing, cordage, and fiber plants; processing, packaging, storage, and handling of vegetables, fruits, and meats; collection and analysis of marketing and production data; and utilization and conservation of basic resources. In addition, different types of services which were incidental to wartime emergencies were rendered and aided in the attainment of agricultural goals, as well as in the allocation and use of fertilizer and feed constituents. Active cooperation was maintained with Federal and State agencies in the promotion and conduct of numerous and varied agricultural production activities.

Brief statements of some of the accomplishments are given in this report. More detailed discussions of the work are given in the Annual Reports for 1943 and 1944 and in the 27 station and 28 press bulletins published during the biennium. Over 150 articles dealing with numerous phases of Florida's agriculture were published in scientific journals, and in farm and trade papers.

ADDITIONAL FACILITIES

Two tracts of land were purchased during the biennium: one comprising 160 acres near Gainesville for use in pasture research; the other, 185 acres adjoining the present main station farm for additional farm crops research. Also, an additional grant of 70 acres of land was made by Hardee County for use by

the Range Cattle Station. A branch station for West Florida was authorized by legislative enactment, and the third Mobile Unit attached to the North Florida Station was activated.

The reconstruction of the Experiment Station building has been completed, and by action of the Boards of Education and Control the building was dedicated Wilmon Newell Hall in honor and memory of the late Director Newell.

EDITORIAL AND MAILING DEPARTMENT

Wartime difficulties which handicapped the printing industry curtailed the printing of Experiment Station bulletins during the second half of the biennium, and only 10 new bulletins were published, making a total of 27 for the biennium. In addition 2,500 copies of a 92-page bulletin published during a previous biennium were reprinted. The new bulletins ranged in pages from 8 to 112, totaling 788 pages. Editions printed varied from 4,000 to 25,000, and totaled 173,000 pages.

Eleven new press bulletins were printed the second year, compared with 17 the first year. Press bulletins reprinted numbered 9 the first year and 3 the second. The press bulletins ranged from 2 to 6 pages in length and from 3,000 to 15,000 in edition, but consisted mostly of 4 pages and 3,000 copies. A total of 104,500 copies of new press bulletins was printed.

A vast amount of Experiment Station information was disseminated through radio talks over WRUF and other stations, through scientific journals, through articles in farm papers with State, Southern, and national circulation, and through newspapers.

LIBRARY

Material for 1,013 volumes was sent to the bindery and 1,528 volumes were received by purchase, gift, or exchange. A total of 22,573 documents, bulletins, and continuations were received and prepared for the shelves. The total number of cards added to the catalog was 36,099. Of these, 25,217 were made in the Library. At present, 42,581 author cards from the Library's catalog are included in the University's Central Catalog. This Library will keep its acquisitions current in that catalog.

An allocation of General Education Board funds for filling-in of periodicals and the purchase of valuable research publications has added a total of 20 new periodical titles and 23 fill-in titles and permitted the purchase of 104 books.

A total of 5,628 pieces of reserve material was used by 3,201 students; 3,026 books were lent to faculty and graduate students and 467 volumes to branch stations and field laboratories.

HORTICULTURAL PROTECTION SERVICE

Intensive work in the frost forecasting service, conducted in cooperation with the United States Weather Bureau, covered the whole of the peninsula. In the administration of the forecasting and temperature survey work this area was subdivided into 10 districts in charge of 8 assistant meteorologists attached to the Lakeland office, each of whom was assigned for the winter within the local area under his supervision. These 10 districts were equipped with 394 temperature survey stations, all in operation during the biennium. Of these stations, 272 were completely equipped with thermographs so that the duration of critical temperatures could be measured. Results of the temperature survey were

published in 10 mimeographed volumes each year, and at most of the stations complete records have been obtained covering 7 to 9 consecutive seasons. Specialized frost forecasts were issued during the winter season for a network of 81 forecast stations, each placed in a carefully planned location, so that the temperature forecast could easily be adapted to individual farms. During the 1942-1943 season a total of 12,231 separate temperature forecasts were made, of which 94.8 per cent were accurate and 98.1 per cent within 3° F. of being correct. In the 1943-1944 season a total of 12,312 forecasts were made, of which 95.3 per cent were accurate and 98.7 per cent within 3° of being accurate. Forecasts were distributed twice daily through a network of 21 commercial radio stations, as well as by telephone and telegraph services and by the daily press. A specialized shipper's forecast and localized rain forecasts were furnished daily to interested shippers and growers. Considerable research in frost protection was conducted at the meteorological laboratory near Lakeland and at other sites. During the summer seasons the field men were assigned to assist in the special hurricane weather service, and the meteorologists of the Lakeland office were assigned to the forecasting staff of the District Hurricane Forecast Center.

AGRICULTURAL ECONOMICS

Some of the investigations of this Department, on which publications were issued, pertained to: (1) trends in the financial structure, the services, the failures and successes of citrus cooperatives; (2) labor and material requirements for crops and livestock; (3) adjustments for greater profits on small flue-cured tobacco farms. Mimeographed summaries of the tenth annual study of cost of production and grove organization were issued, and manuscripts on the investigations of 9 years of successful cooperative grove operation and on Florida Farm Prices, covering a combined monthly and annual price index of 37 Florida farm products from 1910 through 1943, have been prepared for publication.

Motion and time studies for more effective utilization of farm labor have resulted in the following motion pictures: Harvesting Celery; Labor Saving Devices on Celery Seed Beds; Setting Celery; Packing Citrus; Picking Beans; Stumping Land. A faster method for tying staked tomatoes was developed and a poster was prepared for use in the staked tomato area, entitled "Save Work—Save Time in Tying Staked Tomatoes."

Much time was given to assisting the Federal Bureau of Agricultural Economics and the Florida State Planning Board in estimating the maximum wartime agricultural production capacities of Florida and in the formulation of postwar plans for Florida agriculture. This resulted in the following mimeographed materials: (1) a general report; (2) a special citrus report; (3) a special truck crop report; (4) a special labor report; (5) Florida Post-War Agriculture—a preliminary Report of the Southeast Region Post-War Planning Committee, February 29, 1944; and (6) the Report of the Committee on Post-War Planning for Florida Agriculture, January 6, 1944.

In addition, the data in *Florida Truck Crop Competition*, Station Bulletin 224, were brought up to date by mimeographed supplements, and the various summaries since 1928 of the movement of citrus trees from nurseries to groves in Florida, made cooperatively with the State Plant Board, were continued and made available in mimeographed form. The study of breeding efficiency and depreciation in Florida dairy herds, in cooperation with the Department of Animal Industry, is being continued.

AGRONOMY

Variety and strain testing, including the introduction and trial of new crops, cultural and fertilizer requirements of field crops, breeding and selection of improved crops, proper rotations with soil-building crops, and pasture establishment, management, and evaluation received major attention. Wide variation for best production and quality on the several soil types was found in the fertilizer requirements of corn, cotton, peanuts, tobacco, chufas, sugarcane, and pasture and forage crops. The role of sulfur and the use of liquid fertilizer are under study. In general, corn, cotton, and the grasses responded most to nitrogen in a properly balanced fertilizer, peanuts but little to any fertilizer, and bright tobacco showed marked response to a properly balanced fertilizer carrying ample potash. The legumes were very responsive to lime, phosphate, and potash. Trace element needs of crops have been studied and zinc, copper, manganese, boron, and magnesium were found necessary for maximum yields and best quality of certain crops.

Through breeding and selection, outstanding strains of cotton, corn, peanuts, oats, Napier and other grasses, clover, and sugarcane have been developed and distributed. Crop rotation studies clearly indicated the value of proper sequence of crops to avoid disease and insect damage and to maintain soil fertility and profitable crop yields. All crops responded to good rotation practices.

Pasture investigations were expanded to include a wider variety of soil and climatic conditions. Many phases of pasture establishment, management, and evaluation were studied to find plants and plant combinations which, when established and properly managed, will give year-round grazing. Clovers, grasses, and the Florida rust-resistant oats produced satisfactorily in the trial plots and are being increasingly planted by growers.

ANIMAL INDUSTRY

The research of this Department was conducted in the fields of dairy husbandry, animal nutrition, beef cattle, sheep and swine, veterinary science, poultry husbandry, and dairy manufactures.

Feeding trials with citrus molasses showed that it may be used to replace cane molasses in mixed dairy feeds. Approximately 25,000 tons of citrus molasses were produced during the season of 1943-44, greatly relieving the shortage of molasses in mixed feeds. Experiments showed that urea in solution may be added to sorghum as the cut forage goes into the silo, thereby increasing the potential protein value of the silage. Dairy cows consumed plain sorghum silage and that containing 0.5 per cent of urea without hesitation. Silage containing 1.5 per cent urea was less palatable, but all was eaten. Cows avoided silage containing 2.5 per cent urea. Because of the scarcity of bonemeal, another source of phosphorus for livestock was imperative. Feeding trials with beef and dairy cattle, swine, and poultry showed that defluorinated superphosphate was a satisfactory source of phosphorus for all classes of farm animals.

Steers were grazed on seven different types of pasture plantings with and without legumes and with various fertilizer treatments. Values of the various pasture plantings were determined by increases of body weights. Blood samples were drawn and analyzed to detect any differences in composition in the blood of steers. Mineral supplements made available to hogs grazing on peanuts increased pork production 25 per cent over that where no supplements were supplied.

Sanitation has been proved the greatest factor in controlling mastitis in dairy cattle.

Research with poultry included feeding trials to determine rations that would conserve feeds. Labor-saving management methods that may enable the poultrymen to continue operation under a severe labor shortage have been developed.

It was shown that cream produced in Florida may be stored for a twelve-month period without any oxidized flavor being produced. Investigations to find a substitute for serum solids in ice cream were completed. Wheat flour was found to be the most satisfactory product in making a good quality ice cream and may comprise from 2.0 to 2.5 per cent of the mix.

ENTOMOLOGY

Nematode control has received major attention through experiments with resistant varieties and mulching. Some seed of an apparently resistant strain of conch cowpeas was produced and distributed; a number of truck crops have responded favorably to the use of mulches in overcoming nematode injury.

New soil fumigants and insecticides have been tried, among which DD (dichloropropane-dichloroprophylene) and DDT (Dichlorodiphenyltrichlorethane) have given quite satisfactory results. The former has proved effective in controlling both soil infesting insects and weeds; the latter in controlling truck crop and household insects.

The life history, seasonal abundance, and control of cutworms have been under investigation, and some progress has been made in the control of pecan case bearers.

Much time was given during the biennium in assisting victory gardeners to solve their numerous insect problems.

HOME ECONOMICS

The study of the relation of the school lunch to child health and progress, begun four years ago, has demonstrated the value of an adequate feeding program. The effects of better food on two groups of malnourished rural school children are shown by unusual increases in physical measurements and development, improvements in general health, school attendance, and progress. Except for beginners and children transferring from other schools, there are now no cases of severe or gross malnurtition in these two groups. Dental examinations and Roentgenograms made in 1942-43 showed the prevalence of caries and delayed maturation of the wrist bones, and re-examinations indicate that the prescribed dietary regimen lowered the incidence of caries and accelerated calcification of bone centers. At the initiation of the program the food intake of many of the children was very low, due primarily to poor appetites and irregular eating habits. During the four years there has been a gradual increase in food intake, and now food consumption meets the recommended standards for children of school age. Dietary studies show striking improvements in home diets. There are increases in the consumption of protective foods with changes in farm programs to provide these foods for home use.

The vitamin A and C content of Florida fruits and vegetables showed no unusual variations from accepted averages. Occasionally, there was a value significantly different from the average and the reason for the variation merits further study. High values found in wild greens suggest their importance as an adjunct to rural diets. Further studies on the purified acid from royal jelly

($C_{10}H_{18}O_3$) indicate that the acid may have vitamin-like or pharmacological properties.

HORTICULTURE

Many data obtained through research were compiled for use in assisting the developing of a wartime State food production program. These included food, fiber, oil, and rubber crops and the preservation of vegetables, fruits, and nuts.

It was shown that Florida-grown vegetables are well suited for dehydration and produce satisfactory products for rehydration. Certain vegetables, when wrapped in pliofilm, kept in excellent condition both in cold storage and in transit in carlot shipments. Methods of citrus juice concentration by freezing and centrifuging were developed and provide a concentrate which can be kept frozen indefinitely and which, with the addition of water, produces juice that is equal to the fresh product. Cold storage studies brought out improved methods of handling and storing of fruits. It was found that vitamin C concentration was greatest in small cabbage heads regardless of soil and area where grown. Ash per cent was greatest in bean plants grown on less acid plots due to increase in calcium content but percentages of manganese, iron, and magnesium increased as the degree of soil acidity increased. Growing conditions in various locations markedly affected percentage dry weight of cabbage, beans, and tomatoes. The amount and kind of fertilizer necessary in onion production and the value of suitable cover-crops properly handled in potato production were determined.

In cooperation with the U. S. Field Laboratory for Tung Investigations the deficiencies of magnesium and copper in tung trees were demonstrated. The correction of these should materially increase the yield, which in Florida in 1944 was estimated at 2,750,000 pounds of oil. Better methods of pecan orchard managment have been investigated, and pecan oil, following Station research, is now recovered in commercial quantities.

New nematode-resistant stocks of peaches are being tested, and trial plantings with herb, rubber, fiber, and drug plants indicate that certain of these might be grown to advantage in Florida. Sansevieria plantings are being conducted cooperatively with the U. S. Department of Agriculture.

PLANT PATHOLOGY

The control of plant diseases continues to offer many different problems which need to be approached from various angles. Seed treatments of cabbage, lettuce, lima beans, peanuts, soybeans, spinach, and sweet corn with the organic compounds arasan, fermate, and spergon were as good as, or better than, compounds of copper, mercury, and zinc for preventing seed decay of lettuce in soil infested with Pythium. Seed treatment increased germination of machine-shelled peanuts much more than it did hand-shelled. None of the seed treatments protected the seedlings against post-emergence damping-off for more than ten days after emergence.

Different isolates of Rhizoctonia showed various degrees of pathogenicity to any one variety of host plant, but it was not determined whether these isolates represent different species or merely biologic forms.

Drenching the soil with ethyl mercury phosphate gave the best control of *Sclerotium rolfsii* Sacc. which attacked growing plants of Tangiers Iris and Caladium. Treating infected bulbs with hot water did not kill the fungus without also killing the bulbs.

Progress was made in developing a variety of eggplant resistant to Phomopsis

leaf blight and fruit spot, but the new variety has not been tested sufficiently to release it for commercial production.

A total of 26,087 plant specimens was added to the Herbarium, many of which were acquired through exchanges and gifts. The largest number acquired as a single gift was the Severin Rapp collection of 15,770 specimens.

Because of their importance to the cattle industry, many identifications of plants known to be poisonous to livestock were made, and the information given to stockmen.

SOILS

A study of soil and plant relationships under pasture conditions from the standpoint of establishing and maintaining pasture covers was initiated during the biennium under discussion. In this, most emphasis was placed on the leachability of potash from the open mineral soils of Northern and Western Florida and the fixation and availability of phosphates from soluble and insoluble sources. Work with some of the minor elements in this same field indicated that copper, manganese, and zinc, when broadcast on the surface, were fixed in the topsoil much the same as phosphorus; also that there is no great increase in the plant content of these three elements following their application to any of the mineral soils studied to date.

A study of the significance of type and treatment of the soil and its effect on the nutrient quality of truck crops was initiated. The first or survey phase of the work consisted of the collection of a considerable number of soil and plant samples of the principal truck crops from areas of known soil type and treatment for complete mineral analysis, including trace elements.

Improvements in methods of analysis, both chemical and spectrographic, were made during the biennium, and particularly the development of a more accurate and rapid method for determining the base exchange capacity of soils. Such studies involved copper, manganese, zinc, cobalt and boron and specifically the effect of various ignition temperatures or other conditions of reduction on the trace elements which plant materials contain. Definite evidence has been obtained, for instance, that, in some materials, heating even to charring temperatures is accompanied by a definite loss of copper.

Legume inoculation studies continued to show a marked advantage of locally isolated and processed strains of *Rhizobium* over ordinary cultures commonly available on the market; also the great value of heavy growths of such legumes as sweet clover, when properly inoculated, in building up the fertility of Florida soils.

BRANCH STATIONS

CITRUS STATION

(Lake Alfred)

During the biennium under review, a more or less standard nutritional program, including the use of such elements as magnesium, manganese, copper and zinc, in addition to the usual fertilizer materials, was recommended for general use. This included a complete program of fertilization and spraying, with modifications for unusual soil conditions. The basis is preventive treatment to avoid the occurrence of mineral deficiencies and insect or disease injury rather than the corrective treatment recommended in the past. The reception of this program has been especially good, and it is being used on a steadily increasing acreage with excellent results.

The effect of proper fertilization and spraying in increasing resistance to cold damage has been mentioned in previous biennial reports. This was further substantiated in the freeze of February, 1943. It is apparently well established that the presence of any mineral deficiency greatly increases the cold hazard, and that proper fertilization and spraying will enable citrus trees to withstand much lower temperatures without damage than was formerly supposed. In adjoining plots subjected to temperatures of 18° F. in this freeze, deficient trees lost all of their fruit and all of the wood up to 2 inches in diameter, while properly fertilized and sprayed trees lost no fruit or wood and not over 5 per cent of the leaves. This resistance to cold was extended to the fruit itself; Valencias from properly treated trees that were filled with ice during the freeze outgrew the damage and some of these were held as late as August 25 in satisfactory condition; whereas fruit on deficient trees turned soft and dropped in a couple of weeks following the freeze. Part of this resistance is apparently due to a decrease in the rate of thawing because of leaf protection and in part to the fact that sufficient leaves are present to "feed" the fruit so it may outgrow the freeze damage.

The increase in the so-called "purple mite" or "red spider" the last few years has necessitated considerable research work, and as a result DN (dinitro-o-cyclohexyl) was introduced into general use for the purpose of controlling this mite. This material, as a substitute for oil, has been used extensively the past two seasons with very satisfactory results.

EVERGLADES STATION

(Belle Glade)

The problems incidental to the production of foodstuffs in the Everglades were given maximum attention during the biennium. Improvement was obtained in varieties of sweet corn. Two new varieties of beans were released and seed houses furnished seed of one of these (Florida Belle) for the planting of several thousand acres. The Great Lakes Variety of lettuce was found to grow well and some of the potato varieties, not now grown here, produced well in experimental plots. Sugarcane No. 762, originated at this Station, is being planted more and more widely throughout the State for the production of sirup and for forage. Onions new to the region, such as Grano, were introduced and are in production. By virtue of its introduction of new and other varieties and of its advocacy of improved methods of culture, fertilization, and pest control the work of the Everglades Station was recognized as an important factor leading up to the awarding of the Army E to Palm Beach County for vegetable production in the Everglades.

The Coastal Bermuda pasture grass selected from one of several Bermudas at the Everglades Station was furnished to 94 cattlemen in 22 counties who came to the Station for planting stock. Other new promising grasses are on test in the Station pastures. Cattlemen continue to be interested in the experiments underway with the Station's registered herd of purebred Devons. Requests exceed the supply for the purchase of breeding stock from the Station herd. Steer feeding experiments, pasture grazed with some feed supplements, were conducted each year. A foundation herd of Brahman cattle has been obtained for breeding and grazing experiments.

The Station entomologist, assisted by a Canadian entomologist, made collections of an insect parasite and sent them by air transport to Australia where

they arrived in good condition. Four shipments by air of insect parasites and predators were received from South America and were released for observation. Several new and substitute materials such as DN, DD, DDT and the cryolites are under test for insect control and results in some instances were quite promising.

Cooperative research with the Soil Conservation Service, U. S. Geological Survey, and other agencies progressed steadily and plans are shaping up for better regional conservation of the organic soils of the Everglades. Soil and plant tissue test methods are in process of perfection and are being utilized to help ascertain the fertilizer requirements of these peat and muck soils.

Among plants that the Station has studied for several years, sansevieria, and especially ramie, are likely to soon be in commercial production. Russian dandelion for rubber has been successfully grown for the past two years.

NORTH FLORIDA STATION
(Quincy)

The research program of this Station was confined primarily to the solution of problems in agronomy, animal husbandry, and the highly specialized crop of shade tobacco.

The distribution of Florilee, a new variety of oats highly resistant to crown rust and immune to smut, represents a substantial contribution to grain crop production in Northwest Florida. It is an excellent oat for grazing and is more prolific than Quincy 1 and Quincy 2 previously distributed by this Station. Small grain testing and breeding work was expanded to include wheat and barley. Continued production of single cross seed corn for commercial producers of double cross Florida W-1 hybrid seed for market resulted in rapid expansion of acreage planted to this hybrid in all counties in Central and Northwest Florida.

The introduction of new grasses, such as Pensacola Bahia, Paraguay Bahia, Coastal Bermuda, and Bermuda 99, represent significant progress in pasture improvement. Plant material of Coastal Bermuda was supplied to many farmers, either directly or through various agricultural agencies. New species of clovers and improved strains of old species likewise contributed to pasture improvement.

Best adapted field and pasture crop varieties and their fertilizer requirements are being determined in cooperation with farmers on predominant soil types in 9 counties in Northwest Florida through the work of 3 Mobile Units. The third Unit was but recently established. These Units, serving 3 counties each, are now in operation in the following counties: Jefferson, Madison, Leon, Santa Rosa, Escambia, Okaloosa, Jackson, Washington, and Calhoun.

A practical year-round program of pastures and feeds for beef cattle, sheep, and swine was developed and demonstrated on a farm herd basis. Feed lot trials with steers and hogs indicate that those practices are most efficient in utilizing home grown feeds.

Fermate applied as spray or dust gave excellent control of downy mildew in cigar-wrapper tobacco plant beds, replacing the critical materials formerly used. The dust treatment, which required much less labor to apply than spray, proved satisfactory in commercial beds. Seeds of the blackshank resistant Rg variety were produced annually by the Station for growers, while experiments were continued to produce root-knot resistant varieties by breeding and selection.

The work of the Station and of the Mobile Units was examined by many groups of farmers and agricultural workers during the biennium.

SUB-TROPICAL STATION

(Homestead)

A spray of dithane (disodium ethylene bisdithiocarbamate) plus zinc sulfate-lime proved greatly superior to copper fungicides for control of severe late blight infection on potatoes in 1943-44, and proved also to be a highly promising spray for tomato blight control. Under severe blight conditions, Pontiac outyielded Bliss Triumph, the leading potato variety, by 122 bushels per acre, a highly significant increase.

Mowed plots significantly outyielded plowed plots in marketable tomatoes per acre in the first year of a land preparation test on marl soil. Grothen, Rutgers, and Stokesdale proved the leading tomato varieties. Adaptation trials of numerous vegetables were conducted on Perrine marl.

Studies to date show that flower bud differentiation of most mango varieties occurs during October and November. New commercially promising varieties of mango were found. Studies were made of mango scab, a recently discovered fungous disease, which is serious in nurseries but apparently of minor importance in commercial groves. Tests showed that the nitrogen requirements of avocado trees under which large quantities of natural mulch have accumulated may be supplied almost entirely by chemical forms. Rough lemon and Cleopatra have proved better than other rootstocks for practically all citrus on Rockdale soil for drought tolerance, yield, and quality of fruit. New and commercially promising varieties of guava were discovered. Plant vigor, yields, and disease resistance of papayas on Rockdale soil were increased by mulching and by growing the plants on level rather than raised beds.

Cryptostegia grandiflora R. Brown and *Pachyrhizus erosus* Urban, sources of rubber and rotenone, respectively, proved adapted to Dade County conditions.

RANGE CATTLE STATION

(Hardee County)

Progress was made in the development of a research program relative to the main production problems of the livestock industry in South Central Florida.

The Station now consists of 2,250 acres and additional acreage will be added upon completion of deeds and abstracts. Physical developments include the preparation, fertilization and seeding of 250 acres for experimental grazing trials, erection of boundary and cross fences, building of pens and installation of scales to facilitate the handling of cattle. The herd consists of 211 animals, an increase of 144 in the two-year period.

The problems receiving attention are: the breeding of beef cattle for adaptation to Florida environment; wintering beef cattle on the range; the effect of fertilization and seeding on the grazing value of flatwoods pastures; mineral requirements of range cattle; the establishment and growth of different grass and clover varieties as influenced by fertilizer, including minor elements, and management practices; and the effect of water control on the establishment of mixed grasses on flatwoods land.

FIELD LABORATORIES

VEGETABLE CROPS LABORATORY

(Bradenton)

Work was initiated and is progressing satisfactorily on several new projects, with research emphasis being placed on those designed to increase production

in line with national emergency requirements. Variety recommendations with the more important vegetable crops were made and reported.

A new variety of bell pepper, Manatee Wonder, was released by this Laboratory. Its virtues are (1) that fruits are borne pendant; (2) that fruit walls are thick; and (3) that it is productive in Florida. The pendant fruiting character minimizes danger from sun-scald; the thick wall feature makes the variety resistant to blossom-end rot.

In a breeding project designed to incorporate resistance or immunity to several important diseases into new varieties of tomatoes especially adapted to Florida conditions, several lines carrying "immunity" to Fusarium wilt were developed. These need only further testing for yield before one or more can be released.

Field studies of various insecticides and fungicides with different vegetables were continued, with several of the new organic materials showing much promise. These control phases of research are being considered as preliminary, and whenever possible, the breeding of varieties resistant or immune to diseases and insect pests is primarily emphasized.

WATERMELON AND GRAPE INVESTIGATIONS LABORATORY
(Leesburg)

Wilt resistant lines of watermelons developed previously were continued on soil fully inoculated with the wilt organism (*Fusarium niveum* EFS), in comparison with commercial, susceptible, varieties such as Cannon Ball, Tom Watson, Stone Mountain, and Dude Creek. Of these lines as judged by size, shape, color, yield and quality of melons, color of flesh, and color of seed, the Blacklee seemed highly desirable and was released for commercial use.

Experimental work on varieties, nutrition, and disease control of grapes was continued.

POTATO INVESTIGATIONS LABORATORY
(Hastings)

Tests proved that spread of late blight from affected to healthy seed potatoes can be prevented by storing them in buildings where they are kept dry. Profitable increases in yield of Sebago and Katahdin potatoes were obtained by planting 30 bushels of seed per acre, which exceeds the standard rate of seeding by 50 per cent.

A control developed for downy mildew of cabbage in plant beds consists of spraying or dusting the plants 2 or 3 times each week with spergon spray (2 pounds wettable spergon dust to 50 gallons water) or 12 per cent spergon dust. The treatment gave best control when started before the plants were attacked by mildew and when made with power-operated or traction sprayers or dusters.

Of 27 cabbage varieties tested, none proved superior in yield or quality to the best strains of the standard varieties, Copenhagen Market and Glory of Enkhuizen.

Cabbage plants transplanted 8 inches apart in 40-inch rows yielded more than those spaced farther apart and removal of stubble after each harvest failed to increase yields.

STRAWBERRY INVESTIGATIONS LABORATORY
(Plant City)

In research with strawberries and vegetables the Klonmore strawberry variety proved satisfactory for use in Florida. Treating lima bean seed with spergon

or arasan increased the yield by retarding the development of collar rot. Damping-off of vegetable seedlings was prevented by treating Rhizoctonia infested soil with chloropicrin or methyl bromide, and mixing two strains of Rhizoctonia in the soil resulted in reduced pathogenicity of the fungus to the host plant.

CELERY INVESTIGATIONS LABORATORY
(Sanford)

In the studies on the effect of different levels of calcium, magnesium and potash on the boron requirements of celery, indications point to a greater need of boron with a higher potash ratio in the fertilizer. Great Lakes lettuce showed greater resistance to hot weather and tip burn than any other variety yet tested. Irish potatoes, snap beans, and tomatoes were added to the variety trials. All gave promise of proving valuable crops to grow with celery.

Outstanding results were obtained with DDT in controlling cabbage worms, plant bed insects, corn ear worm, and bean leaf rollers and hoppers. Quantities as low as 1 ounce per 100 gallons of spray were effective in some cases. Trials for the control of nematodes by various soil treatments are under way.

PECAN INVESTIGATIONS LABORATORY
(Monticello)

The work of this Laboratory was conducted cooperatively with the USDA Bureau of Entomology and Plant Quarantine. It was confined chiefly to the control of the pecan nut casebearer, and progress was made in the satisfactory use of tar oil, nicotine sulfate, arsenicals, and bordeaux, singly and in combination, at the various stages in the life cycle of the insect.

The closing of this biennium marked the passing of two of the noted leaders of the Agricultural Experiment Station. Dr. Wilmon Newell, Director since 1921, died October 25, 1943, and Dr. Peter Henry Rolfs, Director from 1906 to 1921, died February 25, 1944. These men directed the affairs of the Station for thirty-seven of its fifty-five years of existence.

Respectfully submitted,
HAROLD MOWRY, *Director*

REPORT OF THE DIRECTOR OF THE AGRICULTURAL EXTENSION SERVICE

To the President of the University:

SIR: Herewith the report of the Agricultural Extension Service of the College of Agriculture for the biennium ending June 30, 1944, is respectfully submitted.

The Agricultural Extension Service has devoted much attention to emergency programs connected with the country's war effort, and to those things stressed by the War Food Administration, of which the Extension Service has been a part since March 26, 1943. Many usual procedures have been modified to meet urgent demands and immediate needs. Many employees have entered the military services and others have accepted positions offering higher incomes.

The State Extension Service has served as the main collaborating agency

dealing with agricultural adjustment, soil conservation, and emergency farm labor. In addition, it has cooperated with the Federal Surplus Commodity Corporation, the Farm Credit Administration, the Federal Marketing Service, Selective Service Boards, and State and County War Boards. County Agents have served as usual as the connecting agency between the State and the counties.

In addition to carrying on his normal administrative duties, the Director of Extension has served as administrator of the soil conservation district law; as a member of the State Defense Council; as a member of the U. S. Department of Agriculture War Board; as director of the emergency farm labor program; and on other wartime committees. The supervisory and specialist staffs serve as committeemen in various organizations interested in feed and food production and conservation. The county agents serve on many local committees and in civic clubs, and act as secretaries to county AAA committees, county USDA War Boards, and Soil Conservation District Supervisors.

These extra duties have diverted many of the educational programs from the usual plans as set up during peacetime. The programs are directed to meet emergencies and to foster and promote the best interests as outlined by the War Food Administration in cooperation with State agencies serving agriculture.

Food Production divisions of the U. S. Department of Agriculture were consolidated into one unit, the Food Production Administration, on March 26, 1943. The Extension Service was included in the executive order.

Extension projects included administration, publications, and printing; county agent programs; home demonstration programs; 4-H club work for boys and girls; citriculture; poultry husbandry; animal husbandry; dairy husbandry; agricultural economics; farm forestry; soil conservation; Negro county agent and home demonstration work; and the Florida National Egg-Laying Test.

Personnel: 9 Supervisors; 28 Specialists; 62 County Extension Agents and Assistants; 41 County Home Agents and Assistants; 10 Negro Agents, Men; 10 Negro Agents, Women.

The supervisors and specialists in men's work have headquarters at the University of Florida; the State Home Demonstration Agent and her staff have headquarters at the Florida State College for Women; and the supervisory staff of Negro extension work has headquarters at Florida A. & M. College.

Negro agents serve in counties having the largest number of Negro farmers. Negro extension work in the counties is directed to promote the production of feeds and foods for local supply, through both adults and boys and girls in 4-H club work.

Work in Counties: County agents are serving in 62 and home agents in 37 of the 67 Florida counties. Their programs of work are based on primary farm and home needs in the counties. Supervisors, district agents, and specialists from the State Office supply educational materials and subject matter programs that correspond with the recommendations of the research divisions of the College of Agriculture and the U. S. Department of Agriculture. District agents supervise and the specialists supply subject matter information as a guide in directing the agricultural activities. County agents also have the responsibility of 4-H club work in cooperation with the 4-H Club Division of the Extension Service and serve as liaison agents in the counties, coordinating the activities

of the various branches of the War Food Administration. Their work entails distribution of agricultural programs by contacts, letters, bulletins, and telephone calls; many thousands of farm visits; planning and directing demonstrations; setting up programs and handling farm meetings; conducting tours; and handling encampments for 4-H club work. All of these activities are conducted in addition to miscellaneous regular and wartime demands and the supervision of AAA and farm labor programs.

Florida is divided into three districts, each supervised by a district agent who has the responsibility of selecting personnel, maintaining constructive programs, coordination with specialists and home demonstration agents, arranging for county offices and securing county appropriations, clerical assistance and office space, and assistance at meetings. The State specialists prepare and submit subject-matter outlines to guide procedures in the counties.

FINANCIAL STATEMENT

Receipts

	1942-43	1943-44
Smith-Lever and Bankhead-Jones, Federal	$200,645.82	$200,645.82
Capper-Ketcham, Federal	27,417.72	27,417.72
Clarke-McNary, Federal	1,620.00	1,620.00
State—Salaries	54,214.00	67,980.00
Operating	43,070.00	40,820.00
Continuing Appropriations	5,000.00	30,000.00
County Appropriations	142,504.99	152,504.99
	$474,472.53	$520,988.53

Expenditures

Expenditures	$465,315.44	$503,246.96
Balance carried over	9,157.09	17,741.57
Total Expenditures for the Biennium		$968,562.40

PERSONNEL CHANGES

County Extension agents in the following counties were granted leaves of absence to enter military service: Dixie, Holmes, St. Johns, Bradford, Martin, Citrus, Baker, Sumter, Marion, Bay, Clay and Duval.

From the State Staff:

Wilmer W. Bassett, Jr.—Assistant 4-H Club Agent
Joseph C. Bedsole—Assistant Economist
Dan F. Sowell—Assistant Poultry Husbandman

Resignations to engage in private business:

Ed L. Ayers, County Agent, Manatee County
S. L. Brothers, County Agent, Madison County
James A. McClellan, County Agent, Pasco County
Louis H. Alsmeyer, County Agent, Highlands County
Arthur M. Bissett, County Agent, Highlands County
H. L. Miller, County Agent, Hardee County
R. Holt Howard, Economist, Farm Management
D. E. Timmons, Economist, Marketing

Frequent changes have been made in the personnel for clerical services and labor, many of the replacements having had very limited experience.

PUBLICATIONS

This Division also handles the Agricultural Experiment Station and the College of Agriculture publications and is served by three staff members with clerical assistance.

There are three main divisions, as follows:

(1) The editing, publication, and distribution of bulletins and circulars.
(2) The preparation and distribution of radio materials, with emphasis on the Florida Farm Hour over Radio Station WRUF each day (except Sunday) from 12:00 to 1:00 P.M.
(3) The Agricultural News Service, a clipsheet furnished weekly to Florida newspapers, and other news releases and farm journal articles.

All bulletins supplied to county and home agents are furnished from this office on request. Bulletins are supplied also to individuals requesting them. This informational material forms the basis for subject matter used by Extension personnel.

Farmers' bulletins issued by the United States Department of Agriculture and supplied directly to county offices are approved by the Agricultural Extension Service.

This Division also handles releases issued by the Agricultural Adjustment Agency, the State and National War Boards, and the War Food Administration. These releases are reviewed and interpreted to meet Florida needs and are widely distributed through various agencies, mostly within the State.

Bulletins and Other Informational Material Published and Distributed: The Extension Service has published 11 bulletins, total edition 157,000; 16 circulars, total edition 254,000; other materials consisting of posters, pamphlets, cards, stickers, records, 435,850; Agricultural News Service, 105 editions, total 93,600 copies. It has also distributed daily radio material on timely war topics to 14 radio stations in Florida.

Other miscellaneous duties involved distribution of educational films, charts, maps, and timely material supplied to county Extension offices, civic clubs, and schools, and service as a source of public information wherever these could be utilized.

4-H CLUB WORK

There were 6,036 projects completed by 4,467 4-H club boys. These dealt with the production of corn, peanuts, fruit and garden, dairy, poultry, cotton, tobacco, potatoes, beef cattle, and hogs. The 4-H members are directed by county and home agents. In addition to production and conservation, the boys and girls have training courses for organized studies of rural and farm problems, judging contests and recreation. The members attended 4-H camps each summer. Participation in State and national contests and other events offering recognition for educational accomplishments by 4-H club members was curtailed by wartime conditions.

The State Bankers' Association, private institutions, railroads, and county boards offer scholarships and cash to defray the costs of these awards to 4-H club members.

4-H Regional Camps: Three 4-H State camps are operated, Timpoochee in Okaloosa County; Cherry Lake in Madison County; and McQuarrie in Lake County. Each camp is equipped to handle 125 4-H club members at a time.

Summer camp usually extends from June 15 until August 31. Each group remains at camp for five days and carries out a supervised educational and recreational program. Persons attending are selected on individual records by county and home agents.

4-H Dairy Calf Program: Through cooperative plans worked out between county agents and dairymen, 3,500 dairy heifer calves have been distributed to 4-H club members and to farmers to be grown out and kept as family milk cows. These calves were purchased from well-managed commercial dairies having good producing animals. The delivered cost averaged $5.00 per calf. Many purchased two years ago and now coming into production, valued at $125 each, are producing milk and butter for rural families. Care is taken to see that calves are disease-free and receive proper care by the 4-H club members.

FOOD PRODUCTION AND CONSERVATION

Beginning January 1, 1944, the Agricultural Extension Service was directed by the War Food Administration to enlarge its present program for the production and conservation of foods, feeds and fibers. This order provided funds largely for the employment of assistant agents in counties where such a program would be most appropriate and would return the greatest good for the funds expended.

Nineteen assistant county and home agents were employed. Ninety-five per cent of their time was directed to food production and conservation. They assisted county and home agents in wartime programs, in 4-H club work, and in many other services brought about by war demands on the county Extension offices.

This program was fitted into the Goals Program as set up by the Agricultural Extension Service prior to January 1.

Informational Material: Eleven pamphlets were published for ready distribution. These pamphlets on timely subjects were prepared by Extension specialists and were given a wide distribution to farmers, with the proper emphasis placed on essential war foods and their production in preference to less essential crops.

HOME DEMONSTRATION WORK

Wartime conditions necessarily controlled the activities of all individual families and communities and therefore directly affected the program of home demonstration work. The number of farm families requesting information on food production increased greatly. City and town women called on the home demonstration agents for information on home gardens, poultry, canning and also on governmental regulations affecting their everyday lives. The agents directly helped 21,694 such non-farm families this last year.

Community demands for volunteer war services, coupled with shortages of labor in the home as well as on the farm, showed homemakers the increased importance of efficient home management.

The training in skills and leadership given to thousands of rural women and girls in past years proved its permanent value manyfold under war conditions. These community leaders were ready when war came to give practical information to others and to help with agriculture's wartime work.

Immediate needs of wartime have been emphasized in food production and conservation, food preparation and use, nutrition, health and safety in the home,

safeguarding equipment and supplies, clothing conservation, salvage, government investments and savings, farm labor, leadership, and in maintaining morale and community war activities. Home demonstration agents believed also it was essential for them to keep in close touch with people in their own homes so that home demonstration work would continue to render its first service within those homes, helping to develop a long-time program of education for improvement of people and of family living. Consequently, in spite of travel difficulties and increased duties, organizations of community clubs and councils have been maintained and the training of local leadership has continued; 1,506 training courses on special war activities for 28,622 women and girls were given last year.

Organization and Personnel: Home demonstration personnel at the end of the biennium included 37 county home demonstration agents; 4 assistant agents; 10 Negro home agents; 13 emergency assistants (7 Negro); 4 specialists; 3 district agents; a Negro district agent, and the State agent.

Changes were made in two district positions (one Negro) and in that of clothing specialist. Eighteen changes were made in county home demonstration agents in 1943 alone. This required the use of a large percentage of time for training new and prospective personnel, in addition to in-service training of experienced agents. Fifteen State or district conferences or short courses have been held for this training. Four regional meetings of the women of the State Home Demonstration Council were held instead of one State meeting to aid in developing practical programs. The 4-H Short Course for 4-H girls was not held, but 74 county short courses or camps were arranged.

During 1943, 34,158 rural white families and 4,248 Negro families received direct help from agents. The home demonstration agents made 17,147 visits to rural homes and farms. Negro agents worked with 1,731 women and 2,408 girls enrolled in 127 4-H clubs and with 95 community home demonstration clubs for women.

State and county workers served generally as chairmen or advisers of emergency war programs including the WPB salvage program of Fats and Oils, pressure cooker rationing committees, USDA War Board; home gardens and food conservation committees, State Defense Council; rural women's activities, War Savings Division, U. S. Treasury; State Nutrition Committee; and the State School Lunch Advisory Committee and others. The State agent was State chairman of the first five named.

Emergency Program, Food Production and Conservation: Under the emergency program for increased food production and conservation, assistants were employed to work in 6 counties not employing home demonstration agents; 7 Negro assistants were assigned, 2 on full time and 4 on a seasonal basis, to help Negro families. Part-time clerical assistants were placed in 11 counties. Reports for the three months period show the following results: 2,681 home visits were made; 10,102 bulletins were distributed; 394 meetings were held and attended by 7,549 persons; 582 demonstrations were given; 2,584 families were helped with gardening and 3,053 with food conservation; and 29,992 quarts were canned. These figures are in addition to those in other statistics in this report.

4-H Work with Girls: The 4-H program for girls has not been given as much time as desirable, due to other insistent demands. Not as many volunteer leaders have been available for 4-H clubs as heretofore, because local women

and girls, like the Extension agents, also have had additional demands on their time which prevented much outside service as volunteer leaders for 4-H clubs. Nevertheless, enrollment in 4-H clubs increased by about 1,000 girls this last year. A total of 9,671 was enrolled in 1943.

Negro Work: Ten Negro county home demonstration agents and one district agent worked with 4,248 Negro families last year. Results in increased food production and conservation have been outstanding. A total of 5,240 Negro girls and women was enrolled in 241 homemakers clubs in 1943. All specialists assisted in training Negro home demonstration agents.

Food Production: The long-time goal to keep the family well fed required additional impetus as war made increased demands on food supplies and health. Many farm women and girls did unaccustomed work in the fields to help meet labor shortages and increase food production, and 38,657 home Victory gardens were reported. Wartime food production goals for home gardens and poultry were met and in most counties exceeded. Hundreds of city and town families raised chickens, trying to provide food needed to supplement rationed allowances. Women and girls reported buying 3,322 family cows during the last two years, making a total of 10,763 cows now owned by the present membership. Also 34,842 fruit trees were planted and 2,768 new calendar orchards started.

Food Conservation: Canning in 1943 increased by 400 percent over 1942, the two years' total reported being 4,449,229 quarts of fruits and vegetables; 271,272 of jams, jellies, preserves and pickles; and 623,291 of meats and fish.

Community canning center programs developed in the trucking areas of South Florida to convert commercial surpluses from tomato and other vegetable fields and citrus groves into wholesome ready-to-serve foods and thereby prevent great waste of good food already produced. One county reports 39,893 cans filled during the last season in the five community canning centers, stating that at least 85 per cent of the vegetables canned would have wasted without the organized canning program.

This conservation of such resources through canning in community centers saved food, time, labor, seed, fertilizer, equipment and transportation.

Shortages of small-size canning equipment and the poor quality of some of the wartime pressure cookers handicapped the canning program. Neighborhood groups pooled their equipment. At least 93 small community canning centers were operated this last year under the general direction of home agents.

Nutrition: The war brought a challenge to Florida people to become more self-sufficient by planning, producing, and using the abundance of our available food resources to better effect, nutritionally speaking: 18,179 families reported they planned and produced their own food supply in 1943; 4,304 families enrolled for special help in budgeting and buying quality food wisely. Best methods of cooking food to save nutritive values and for palatability were the theme of 5,421 demonstrations given by home agents this year. Merchants and agents cooperated in working out practical aids to housekeepers in saving and using rationed foods and in spending the ration points to get greatest nutritional values.

Health and Safety in the Home: To maintain or secure good health for each person has been considered a wartime necessity. Cooperation with health authorities has made possible many improvements in health in spite of the shortages of available medical care: 5,729 families reported they had taken definite

measures to improve their health; 1,785 club girls had health examinations by physicians. First aid kits have been made in hundreds of homes; 69 home nursing courses have been given to 810 women who served as neighborhood leaders; and 251 first aid courses were conducted in cooperation with the American Red Cross with an enrollment of 3,613 women and older 4-H girls. Home demonstration agents gave 530 nutrition courses with 7,634 women and girls enrolled, and 57 canteen courses. Home sanitation prevented many costly illnesses. Reports show home demonstration women and girls screened 1,060 homes; installed 676 toilets; repaired 1,249 homes; and painted 1,925 houses and outbuildings. Removal of fire and accident hazards from the home and farm was a state-wide project, especially with 4-H girls. A total of 157 courses was given to 2,756 girls and 4-H girls who agreed to serve as neighborhood leaders in home fire prevention.

The hazards of hookworm have been taught in rural sections and emphasis has been placed on the need of a tested source of home water supply.

Safeguarding Equipment and Supplies—Thrift and Salvage: Pressure cooker "clinics" were held in all counties and 259 sewing machines were overhauled in "clinics."

Florida was the first state to exceed its quota in collection of waste fats. Tin and scrap were collected in great amounts.

Conservation of textile materials required emphasis on remodeling, mending, care and proper storage of clothing. Better home sewing to offset labor shortages and higher costs was urged; and 8,897 families were assisted with clothing construction problems in 1943, an increase of 18 per cent over 1942. During the two-year period 13,116 families were helped with clothing care, renovation, and remodeling. With labor shortages everywhere, 7,071 families reported doing the family laundry for the first time in 1943. Approximately 1,925 houses and outbuildings were painted both for appearance and preservation. Cash savings made through better management and increased incomes have been put away, usually in Government bonds, to be spent later when new equipment is available. A better understanding of the price control program and the possibilities of inflation has been presented in all clubs.

Community Activities: Home demonstration clubs for women and the 4-H clubs for girls are organized on a community basis and assist with or initiate worthwhile community activities: 303 clubs for women had an enrollment of 8,548 adult women in 1943, while 9,671 girls are enrolled in 451 clubs. These clubs, together with county councils, with leaders trained in various skills, have led community or county campaigns or drives as a result of their training in organization. Pioneers in their interest in the school lunch program, home demonstration clubs, both women and 4-H girls, actively assisted in 308 school lunchrooms serving 30,000 children, helping to plan and initiate the program, furnishing recipes and equipment, and acting as volunteer leaders to do the work. Eighty-one community buildings or rooms serving as community centers are owned by home demonstration clubs. Recreation programs conducted in many communities helped to offset any feeling of isolation caused by transportation shortages and to maintain community spirit.

Cooperation and better understanding of mutual needs between urban and rural people is one of the finest results seen in the State growing out of wartime situations.

LIVESTOCK PRODUCTION

The stimulus for higher production of meat and dairy products is reflected in better management of livestock generally Extension workers have encouraged improved management practices and the distribution of high grade and purebred breeding stock. Through the improvement of 250,000 acres of cut-over and prairie lands pastures have been doubled in grazing value. Most of these lands have been fenced.

Dairy producers have faced a shortage of labor and feeds. Some dairies have disposed of herds and many readjustments in feeding practices have been necessary. Emphasis has been placed on improved pastures, the culling of low producers, readjustment of labor needs, and milk deliveries and substitutions in equipment. These are the problems most urgent at present and are considered in their proper place in this adjustment period.

POULTRY

Poultry producers have far exceeded the production goals set up to supply wartime needs. Commercial poultrymen have increased their production and backyard pens and farm flocks have been increased in numbers. Recommendations of the Extension Poultrymen were followed for selection of baby chicks, management of growing pullets, and culling and parasite control, resulting in low mortality in flocks.

Broiler production in 1942 was greatly expanded, but due to higher feed prices it was reduced in 1943.

In cooperation with the Federal Marketing Service, 12,000 cases of surplus eggs were purchased in 1942 and 40,000 were purchased in 1943. These Government purchases have removed temporary surpluses in Florida's farming area.

Forty-six 4-H club members participated in the poultry and egg show held at the Central Florida Exposition in Orlando in 1942.

Florida National Egg-Laying Test: The average production for 1,118 pullets in the Florida Egg-Laying Test was 200.5 eggs per bird in a period of 12 months. The test has been in operation for 17 successive years and is patronized by successful breeders in Florida and other states.

FORESTRY

Florida farmers protected approximately 180,000 acres against fire under plans worked out cooperatively with county agents and the Extension Forester. These lands then became forested with young pine timber. It is estimated that 9,000,000 board feet, valued at $45,000, were protected and saved.

Timber stands improvement through the cutting of cull trees, worked-out turpentine trees, and other trees needed in thinning of timber, is effective in improved farm forest properties. Cooperation was extended to the farm foresters in the Norris-Doxey Farm Forestry and Farm Forest Products program in establishing and improving cutting demonstrations on farms.

One million slash pine seedlings were offered to 4-H club members and vocational students by a local pulp mill. County agents distributed 600,000 of these seedlings, the remainder were distributed by the State Forest Service.

Assistance was given to marketing forest products. Farmers were instructed in estimating standing timber and the value of trees as to their best use. Forestry extension work involved 4-H club members. A program built around good forest

practices has become part of the 4-H program and is rendering valuable service in forestry teaching.

The desirability of a practical plan for the complete and proper development of the State's extensive cut-over land areas is apparent. This is set up in cooperation with the U. S. Forest Service, the Soil Conservation Service, and the Florida Experiment Station to determine a suitable procedure for a coordinated timber-grazing-game program. It is estimated that 75 per cent of the State's cut-over lands can be improved by a constructive program with this in view.

The Extension Forester has taken an important part in a general over-all rural emergency fire protection program.

CITRUS

Restrictions on the use and distribution of fertilizer, spraying material, and a definite shortage of labor have required many changes in the growers' program and necessarily county agents were required to meet these conditions. Many normal activities were reduced, much pruning has been neglected, and fertilizer applications have been irregular. In 1942 committees were established to work out good fertilizing practices and present the needs for essential fertilizing elements. As a part of the program, emphasis was placed on production of cover crops and green manures to make up deficiencies due to the lack of commercial nitrogen.

The uses of dolomitic limestone became widespread after it was learned that this material was a good one for citrus. Boron, zinc, and iron were needed to complete the nutritional program so that production would be increased.

In cooperation with the Florida Citrus Commission, the better fruit program was revised and information was supplied to growers.

Labor conditions made it necessary that growers substitute sulphur dusting for spraying in rust mite control. This, apparently, has proved a satisfactory practice and one more easily accomplished during a labor shortage.

Nutritional sprayings included applications of copper, zinc, and manganese. Groves receiving these treatments have continued to improve and the quality of the fruit indicates that these practices produce satisfactory yields. During drought periods irrigation has been needed, but on account of the difficulty in securing irrigation equipment, growers have been compelled to change cultivation practices.

NEGRO EXTENSION WORK

Negro Extension work has been continued in those areas of general farming where there is a relatively large ownership of farms by Negroes. The Negro educational program has the supervision of the district agents and specialists. The main emphasis has been on production, mostly for local use.

Assistance was given so that colored farmers would receive the full benefit of current prices from their crops. Emphasis was placed on home gardens, poultry, meats, and the conservation of foodstuffs, with special attention given to vegetable varieties in the canning of surplus products.

Two crops received special emphasis. These were sugar cane and sweet potatoes, both of which have a relatively high food value and require good management. Through cooperation with the Experiment Station, selected varieties of sugar cane adaptable to areas were issued to farmers as planting stock.

Puerto Rican sweet potato seed stock was obtained from adjoining states and demonstrations on management of plant beds were carried out by Negro Extension agents.

Five thousand, two hundred and seventy-one victory gardens were reported by the agents. Four hundred and seventy-two Negro families secured milk cows. Four thousand, six hundred fifty-seven Negro farmers cooperated in peanut production. Special emphasis was given to meat curing and meat supplies for family use.

Four-H club work was carried on as usual with 1,560 boys completing their projects, producing essential food crops, in accordance with the war food program.

AGRICULTURAL ECONOMICS

Farm Management: Farm and grove records and income accounting forms are made available to farmers and are supervised by Extension Economists. Grove records on 298 citrus properties have been checked and analyzed to enable growers to check practices and provide data for income tax reports. Records that have accumulated through several years will be the basis for future practices when conditions return to normal.

Similar records are available for use by livestock, forestry, vegetable, and poultry producers.

The National Farm Outlook Program is followed through in each state. The data collected form a basis for annual state and national agricultural outlook statements and furnish a guide to farmers for production and marketing, taking into consideration wartime needs and restrictions.

Marketing: The marketing program has undergone many changes due to marketing restrictions, price ceilings, transportation, and distribution. The Marketing Specialist cooperated with the Florida Canners Association in securing equipment, labor, packaging and storage. He has also rendered assistance to bulb growers in marketing off-grade stock and planting stock; to hog producers in the management of cooperative auction markets; to pecan growers in cooperative marketing and the management of farmers' markets which were set up at four centers in the pecan area, where 300,000 pounds of pecans were sold on a competitive basis at satisfactory prices; to the Florida Division of the American Institute of Cooperation; National Council of Farmer Cooperatives; and to the State Defense Council.

AGRICULTURAL CONSERVATION AND EMERGENCY PROGRAMS

The Florida Agricultural Extension Service works closely with the Agricultural Adjustment Agency. The county agent is secretary to the county agricultural conservation association and to the county USDA war board. In Florida counties AAA, Extension, and USDA war board work is conducted in the same offices.

Enlargement of the output of foodsuffs was the principal activity of the AAA, and incentive payments were made to farmers following designated practices to accomplish this purpose. Materials made available, through which the practices could be given greater efficiency, mostly consisted of seeds and plant foods. Terracing service also was rendered in numerous instances.

The State AAA administrative officer was chairman and the Director of Extension a member of the Florida USDA War Board. State and county war boards

rendered assistance to farmers in connection with farm machinery and supplies, copper wire quotas, construction applications, transportation, farm slaughter and livestock dealer permits, salvage campaigns in rural areas, purchase and support price programs, production goals, and farm labor deferment by selective service.

PRODUCTION GOALS

Production goals covering food and feed crops and livestock products were set up for Florida by the War Food Administration. These goals were then broken down to counties and, in turn, to individual farms.

When goals were assigned to a county the county agent, in cooperation with war board members, allotted the goals to farmers and proceeded to secure a farm-to-farm sign-up. With the exception of peanuts, practically all goals were exceeded, resulting in substantial increases in essential crops, livestock, vegetables, and feeds.

The State also appointed goals committees with Extension specialists as chairmen, and the membership from other personnel in the counties provided informational background dealing with fertilizing practices, varieties, feeding practices, protection against disease and insect damage, and good marketing practices.

The production of essential war crops for the year 1943 is the largest on record and this has been accomplished in spite of shortages in fertilizer, farm machinery, labor, and suitable feed for dairy and poultry production.

SOIL CONSERVATION

The State Soil Conservation program is conducted in close cooperation with the Federal Soil Conservation Service and the Florida Experiment Station. An effort has been made to put soil conservation behind food and fiber production, since soil depleting crops are needed in large amounts for the war effort.

On January 1, 1944, 15 soil conservation districts had been established and five others were in the process of completion. Educational work in the districts is conducted through the office of the county agent, who serves as Secretary to the Board of Supervisors. Reports from 17 counties show that 75 educational meetings were held with a total attendance of 2,520. Twenty-four farm planning meetings were held and attended by 280 people. There were also 21 local demonstrations, 6 tours, and 37 programs before civic clubs.

Each supervisor was supplied with information governing the recommendations of the committee and procedures as set up for the management of this program.

EMERGENCY FARM LABOR

The Emergency Farm Labor Program got under way in Florida about April 15, 1943, following a Congressional Act. Recruiting, transportation, feeding, and housing of inter-state and foreign labor were done under the direction of the War Food Administration. Where laborers were housed in camps, WFA's Farm Labor Division managed the camps, and the Extension Service placed the labor. Recruiting and transportation of local labor were done by the Extension Service. County agents operated labor placement centers in the counties and received requests for labor.

From May 1, 1943, to June 30, 1944, the emergency farm labor program

provided 1,104,279 man-days of labor for Florida farms, as shown in the accompanying table. Of this, 292,700 man-days were performed by domestic Negroes, 82,700 by domestic white laborers, 486,300 by Bahamians, 188,000 by Jamaicans, and 29,600 by war prisoners.

In addition to procuring and placing labor for Florida farms, the Extension Service recruited in this State to be sent to states farther north during the summer months a total of 9,590 laborers from 11 counties, who were sent to 17 states between March 15 and June 30, 1944.

Harvesting Vegetables and Citrus: Harvesting of the 1943-44 vegetable crop required approximately two million man-days, of which 48 per cent or 989,805 man-days were supplied through the emergency farm labor program.

Harvesting the 1943-44 citrus crop of 80 million boxes also required approximately two million man-days, of which this program supplied 14,471 man-days, or approximately 6 per cent.

Surveys indicated that practically no citrus and less than 2 per cent of the vegetable crop were lost because of lack of labor.

Workers supplied to vegetable growers came from the Southern states and the Bahama Islands. Domestic citrus laborers were recruited primarily in Missouri, Arkansas, Mississippi, Alabama, Georgia, Tennessee, North Carolina, Virginia and Maryland. Sugar cane workers were principally domestic Negroes, Jamaicans, Bahamians, and war prisoners.

Workers were housed in private camps and in 24 farm labor centers operated by the War Food Administration.

MAN-DAYS SUPPLIED BY EMERGENCY FARM LABOR PROGRAM—FLORIDA

Harvesting Potatoes, Vegetables, and Sugar Cane:

1943						
April-June	July	August	September	October	November	December
28,100	12,300	20,400	20,600	25,500	51,638	99,110

1944					
January	February	March	April	May	June
112,333	135,728	136,575	124,680	95,806	40,524

TOTAL 989,805

Harvesting Citrus:

1943		1944					
November	December	January	February	March	April	May	June
5,320	14,580	17,276	14,487	22,591	17,326	16,816	16,088

TOTAL 114,474

GRAND TOTAL 1,104,279

SOURCE OF LABORERS

	Man-days
Bahamians	486,300
Jamaicans	188,000
Domestic Negroes	292,700
White Workers	82,700
Prisoners of War (German)	29,600

Victory Farm Volunteers: The decrease in number of men and women available for farm work in Florida during 1943-44 made additional demands on boys and girls 14 to 18 years of age, to assist in the production and harvesting of food and other essential war crops. School officials gave splendid cooperation

in making adjustments in schedules for opening and closing schools in counties where there was an acute labor shortage. Recruitment and placement of school boys and girls were centered largely in the local schools, directly in charge of one or more teachers who looked after assignments as well as transportation to and from farms.

During the summer of 1944, 150 non-farm youth were recruited and sent to Connecticut for the production and harvesting of shade tobacco. One group of 56 boys, brought to Florida from southwestern Virginia for an eight-week period, assisted in citrus harvest during April and May, 1944. These boys, 16 to 18 years of age, were accompanied by four supervisors and all were housed in a farm workers' camp in the citrus area.

Health and safety of the youth doing farm work were emphasized at all times. More than 1,400 non-farm youth were made available for the production and harvesting of food and other essential crops through the Emergency Farm Labor Program during the period from June, 1943, through June, 1944.

Respectfully submitted,

A. P. SPENCER, *Director*

REPORT OF THE DEAN OF THE COLLEGE OF BUSINESS ADMINISTRATION

To the President of the University:

SIR: The College of Business Administration, during the biennium ending June 30, 1944, has experienced two years of war which have greatly affected its faculty, its student body, and its other activities. The enrollment of civilian students directly in the College, as well as in the courses offered by the College, has greatly decreased. Whereas the number of students in 1941-42 was 231 and the number of graduates 112, in 1943-44 the number of the former dropped to fewer than 50 and the number of the latter to 31. Registrations in the second semester of 1943-44 reached an all-time low, but there is considerable evidence that, with a return of discharged veterans and prospects of an influx of rehabilitation students, registrations will increase appreciably with the opening of the University in the fall of 1944.

The College of Business Administration at the beginning of the biennium had twenty-one full-time faculty members. As the biennium progressed, the war made inroads upon these faculty members. By the end of the biennium, two had resigned to go into the private practice of accounting and leaves of absence had been extended to two to accept commissions in the Navy, to three to accept commissions in the Army, and to five to enter government service. Of those entering government service, two became specialists in the Department of State at Washington; one, an economist with the Regional War Labor Board in Atlanta; one, an economist with the Office of Price Administration in Jacksonville; and one, a research analyst with the Office of State Auditor. Since enrollments had greatly decreased, none of these faculty members was replaced, thereby effecting great savings in the operating budget of the College of Business Administration.

Two other staff members have served part-time in government positions. The director of the Bureau of Economic and Business Research was released half-

time from his University duties during the past year to act as Executive Secretary and Research Director of the Governor's Committee on Governmental Research. The Dean of the College was appointed as part-time public member of the Fourth Regional War Labor Board in Atlanta and has served on this board for a year and a half.

Two faculty members during the biennium completed their work for the degree of Doctor of Philosophy. Of the faculty of this College at present, counting those on leave, twelve have doctor's degrees, six have master's degrees, and one has a bachelor's degree. In addition, one has received the LL.B. degree; one, the degree of LL.D.; and three, the CPA, which in accounting is even more necessary than a Ph.D. The faculty has strengthened its position, and ranks high not only as compared with other faculties in the University but also as compared with the faculties in economics and business administration in other institutions in the South and in the nation.

The College of Business Administration has not engaged in any specialized war program of its own. Its courses and offerings were not of such character as to fit into the specific demands created by war. But in the basic war-training program in which the University engaged there were included courses in geography, history, and mathematics. One faculty member, assisted by four others, served as chairman of the first course; three faculty members helped to teach the second course; and two helped to teach the third.

Other than certain curricular adjustments and changes in courses which were necessary to meet the needs of students arising out of war, the College of Business Administration has made no recent revisions either in courses or in its curricular offerings. During the past year, however, committees have been at work on postwar curricular readjustments. These committees are studying every offering as it has been affected by war and as it may be affected by postwar conditions. Both the curriculum in Business Administration and the curriculum in Public Administration are undergoing the closest scrutiny. Some far-reaching revisions may result from the studies that are in progress. For example, the College of Business Administration may decide both to offer a fifth year leading to a professional master's degree and to recommend to the Graduate School that it be permitted to offer the degree of Doctor of Philosophy in the field of economics.

The Bureau of Economic and Business Research which is a part of this College has continued to operate effectively. Its chief activity has had to do with the publication of *Economic Leaflets* which started in December, 1941. This publication carries articles which are prepared by University faculty members; which deal with government, taxation, industry, commerce and finance; and which are of direct interest not only to business men but also to individual citizens and those concerned with the administrative problems of state and local government. The *Leaflets* have commanded the attention of a wide variety of readers, have been increasingly made the subject of editorial comment, and have achieved high distinction among the publications which are issued by the University.

The College of Business Administration after the war will be confronted with greatly increased demands for its curricular offerings and its services. To begin with, it is believed that the number of students will greatly increase—in the University in general and in this College in particular. Plans are already underway to take care of these students—in new courses, in revised curriculums,

and in other ways. Before the war, it was a problem to provide faculty members and classrooms to take care of the ever-increasing number of students who came to the University for business and public administration. Every year more and more came. After the war the pressure will probably grow greater. It is predicted that it will be necessary to provide *annually* for the registration of at least 300 students and for the graduation of at least 175. This growth will not, of course, come next year or all at once, but it is likely to come before the next biennium is over, particularly if the war ends both in Europe and Asia before the close of 1945.

To be ready to meet these prospective demands, four things will be necessary: first, increased salaries for those faculty members who are now on leaves of absence but who will return after the war—increased salaries commensurate with, if not in excess of, the increased salaries received by those who remained at their present posts; second, increased classroom space and office facilities; third, replacement of the two men who resigned during the biennium to enter private business; and, fourth, employment of two or three new staff members.

In 1941, an appropriation was made by the Legislature to construct the first unit of a new building for the College of Business Administration. The appropriation was permissive and the funds provided therefor never became available. This appropriation should be revived and every effort should be made during the next biennium to set in motion plans looking toward the construction of this building. New quarters for this College would provide more adequate quarters for other colleges and divisions of the University.

Finally, the Bureau of Economic and Business Research should be expanded into an institute of economic and government research. The State of Florida is increasingly making demands upon the University in this respect. It has available few of the research or other facilities that are possessed by a number of other states. It has no *continuing* agency for the conduct of research either in the field of economics or in the field of state, county, or city government. While the Governor's Committee on Governmental Research, which was appointed last spring to formulate plans for the Legislature of 1945, is functioning effectively; while the College of Business Administration has had its Bureau of Economic and Business Research with its very limited facilities; while some individual professors in that College as well as in other parts of the University have carried on a few studies in taxation, economics, and government; and while the Florida Economic Advancement Council has had some funds for research purposes, there have been no permanent organizations in Florida with definite appropriations charged with the responsibility of conducting a *continuous* program of research in the field of economics and public administration.

The institute of economic and government research would remove this deficiency and would engage in four types of work: first, research concerning problems of state and local government, of finance, and of manufacturing and distributive industries; second, preparation and publication of reports and bulletins to be used by business men and state and local officials; third, preparation and publication of manuals and administrative handbooks needed by these officials in the operation of their offices; and fourth, cooperation with the General Extension Division in the holding of conferences or short courses, either separately or in connection with the offices of State and local government and the annual meetings of state-wide associations of county and city officials, such as the Sheriffs' Association, the Association of County Commissioners, and the City

Managers' Association. These officials in these short courses or conferences, would be made acquainted with the results achieved by the institute, with what has been done in other states, and with the difficulties involved in introducing into Florida suitable adaptations of practices in other states. Research bulletins and manuals, either distributed at the conferences or following upon the heels of such conferences, would be supplied to the officials. Coupled with these activities, research on particular problems would be prosecuted and expert counsel and advice would be made available to government agencies on matters requiring immediate attention.

The proposed institute would require an annual appropriation of $20,000. This is a small amount when compared with the budgets of many other government agencies. Of this amount $16,500 would be used to employ research staff members and assistants and $3,500 to take care of operating expenses and publication of manuals and research bulletins. The institute would be administered by the College of Business Administration and would take over the activities of the present Bureau of Economic and Business Research, which have necessarily been limited because the Bureau has been operated on a part-time basis by only a few staff members.

Respectfully submitted,

WALTER J. MATHERLY, *Dean*

REPORT OF THE DEAN OF THE COLLEGE OF ENGINEERING

To the President of the University:

SIR: I have the honor to submit to you the following report of the College of Engineering for the biennium ending June 30, 1944.

All the activities of the College during the past biennium have been conducted wholly for the war effort. In fact, this biennium has been the most active period that the College of Engineering has ever experienced. Several years before the actual outbreak of the war, industry's demand for engineers caused a large increase in enrollment. The Selective Service Act did little to change this until the past year. Furthermore, our curriculum was accelerated in order to make it possible for our students to qualify more quickly than usual for degrees, thereby allowing them to render service, either as commissioned officers in the armed forces, or as civilian engineers in war industries. This acceleration of our program produced a severe strain on both faculty and students.

Particular emphasis has been placed on the problem of adjusting our curricula to meet war needs. While no basic material has been omitted from our program, material having particular war significance has been stressed. No new curricula have been added, but emphasis has been placed in the Civil Engineering Department on the field of Sanitary Engineering, in Electrical Engineering on Electronics, and in Mechanical Engineering on Aeronautics. At the present time, six foreign students are taking graduate work in the field of Sanitary Engineering.

IMPORTANT PROBLEMS AND PROJECTS

The College was also chosen by the U. S. Office of Education to operate the training of workers for industry at the college level for the State. This program

was carried out first under the Engineering Defense Training Program and afterwards under the Engineering, Science, and Management War Training Program. At the outset, the Dean of the College directed this program, but after he was chosen as Regional Advisor of the District and appointed Regional Representative of the War Manpower Commission on this work, the directorship of the program was placed in the hands of Professor N. C. Ebaugh, who has ably handled the program and adjusted it to meet changing industrial needs.

During the biennium, the Engineering, Science, and Management War Training Program and its predecessors have given war training to 9,000 Florida citizens. Ninety-nine courses in over fifty different subjects have been conducted for essential war industries in the following cities throughout Florida during the past year: Pensacola, Panama City, Tallahassee, Gainesville, Jacksonville, Orlando, St. Petersburg, Tampa, Mulberry, Bartow, Bradenton, West Palm Beach, and Miami.

The Government called upon the College to work on special war research projects and this placed another heavy load upon the faculty. Later came the Army Specialized Training Program in which, with the exception of two courses in mathematics, a course in physics, and a few courses in chemistry, the entire advanced phase consisted of engineering courses. While other colleges on the campus gave some assistance by providing faculty members for this program, the specialized professional character of the College of Engineering and the scarcity of qualified teachers in the program resulted in even greater overloads being carried by an already overworked faculty.

Special qualifications, particularly in electronics, have caused the Army and Navy to send selected groups of military personnel for special training in particular fields, in at least one of which this is the only school in the United States prepared to give the type of training desired.

During the past biennium, the Department of Chemical Engineering was accredited by the Engineers' Council for Professional Development and the American Institution of Chemical Engineers. This means that all of the departments of the College of Engineering are accredited—a distinction enjoyed by comparatively few institutions.

The faculty has been very loyal and has accepted long hours and difficult assignments in the knowledge that it was making a worth-while contribution to the war effort. Much work has to be done on a twenty-four hour basis, and during this war period it is seldom that someone cannot be found at work throughout the entire day.

LABORATORIES

Much new equipment has been secured, partly because of special courses which were requested by the Army Specialized Training Program, but mainly because of special research work. This equipment has been paid for almost entirely by the Government, much of it through the Civil Aeronautics Authority funds. Equipment secured in electronics makes our facilities in this important field outstanding among college laboratories.

The Sanitary Engineering Laboratory has also been materially improved and should be valuable for future courses in this field.

The Chemical Engineering Department has likewise secured a new tensile testing machine, equipment for crushing and grinding, heat transfer, filtering,

etc. Much equipment was constructed in our own shops. The expansion of our facilities for laboratory instruction in Chemical Engineering was a major factor in securing recognition for this Department by national agencies.

The equipment in the shops has been augmented so that it is in better shape than it has ever been. Much of this equipment has been loaned us by the U. S. Army.

Welding and heat treating laboratory equipment was greatly expanded to train the large numbers of Army personnel of the College, assigned under the Army Specialized Training Program. Many basic instruments for instruction and research were added in the internal combustion engines and aeronautical laboratories in order to keep this equipment abreast of recent developments.

The College has been able to make a small addition to its laboratory space, using funds received from the Lime Rock Association and from the Civil Aeronautics Authority. More space will be needed in the postwar period, particularly if the College, through the Engineering and Industrial Experiment Station, is to take its part in postwar developments for the industries of our State. It would be a real help if buildings constructed for the College, and now being used by other departments, could be returned for our use.

CURRICULA

Studies are now being made to adjust the curricula to meet postwar needs adequately and to take care of returning veterans. Special problems will be presented, particularly with reference to returning Army Specialized Training Students who may wish to secure engineering degrees. The importance of balancing technological instruction with courses in other fields is being given careful thought.

The Florida Industries Cooperative Plan, which has been a valuable contribution to both industry and to the students, is practically dormant at this time. It is to be expected that in the near future this program will be reopened. It should prove of greater interest and value than ever before.

STAFF

Two members of our staff are now on leave of absence as officers of the U. S. Navy. As the teaching load has decreased during the past year, many members of the faculty have been transferred from teaching duties to research work, much of which is being done for the armed forces.

Dr. Palmer H. Craig has been appointed Head of the Electrical Engineering Department and, under his able guidance, the Department is doing outstanding work in the war effort.

A shortage of instructors in the Civil Engineering Department is particularly acute at the present time and, while every effort is being made to remedy this situation, probably very little can be done until industrial and war needs make qualified persons available.

Members of the faculty have served in many important State and national activities. Members of the staff have held the following positions: Secretary of the State Board of Engineering Examiners; Secretary and Director of the Florida Engineering Society; Secretary of the American Institute of Electrical Engineers; Director of Engineering, Science, and Management War Training activities in the State; Regional Representative for Engineering, Science, and Management War Training to the War Manpower Commission; Regional Advisor

for the Engineering, Science, and Management War Training; Educational Coordinator for the Fourth Service Command; Director of the Society for the Promotion of Engineering Education; Vice President of the Southern Section of the Society for the Promotion of Engineering Education; Chairman of the Chemical Engineering Section of the Society for the Promotion of Engineering Education; member of the Executive Committee of the Mechanical Section of the Society for the Promotion of Engineering Education; and member of the Region IV Committee for the Engineers' Council for Professional Development. During the biennium, several members of the staff have contributed technical articles to engineering publications of national interest.

Industry has also called upon staff members to assist it in many war problems and, because of this, the war effort has been materially aided by this College.

RECOMMENDATIONS

With the cessation of hostilities, many of the returning members of the armed forces will seek technological training and it will become the responsibility of our State to take care of them. Large numbers of the Army Specialized Training Program students have already indicated their desire to return to the University of Florida to secure degrees. It is to be expected, therefore, that within a few years, the enrollment in the College will be greater than ever before. We may be called upon to increase not only our physical plant, but our staff as well.

In certain engineering fields, the University of Florida has secured some eminence, not only because of its staff, but because of its equipment. It is recommended that, particularly in these fields, efforts be made, by replacing obsolete equipment and securing newly developed equipment, to maintain our present standing.

It should be pointed out that because of the many technological changes that have been brought about during the war, much new equipment must be secured in the postwar period if we are to keep our laboratories up-to-date. While much equipment may be secured from the Surplus War Commodities Corporation, it must still be purchased. Unless funds are made available for this purpose, we shall have to make much larger expenditures at a later date for probably much less equipment.

Added space will be required to meet the demands of the future. Washroom facilities are particularly poor and should be improved.

Loads in the College of Engineering have always been too heavy and a sufficient staff should be provided to reduce them.

Respectfully submitted,

JOSEPH WEIL, *Dean*

REPORT OF THE DIRECTOR OF THE ENGINEERING AND INDUSTRIAL EXPERIMENT STATION

To the President of the University:

SIR: I have the honor to submit to you the following report of the Engineering and Industrial Experiment Station for the period ending July 1, 1944.

The function of the Engineering and Industrial Experiment Station, as

specified in the law passed by the 1941 Legislature, "shall be to organize and promote the prosecution of research projects of engineering and related sciences, with special reference to such of these problems as are important to the development of industries in Florida." In November, 1943, Governor Holland authorized and released funds for proceeding actively with research work of particular value to the industries of the State.

The policy of the Station may be outlined as follows:

1. To work closely with existing industries of the State in order to assist in expanding and developing projects that have already been started.
2. To encourage industry to submit problems which confront it and which the Station may help solve in the laboratory.
3. To develop new products which can be made in Florida and which would attract new industries to the State.
4. To find new industrial uses for the natural resources and agricultural products of our State.
5. To assist State agencies by making available special facilities which they do not have.
6. To assist in the solution of various engineering problems which affect the welfare of the State.
7. To correlate the Station activities with those of other agencies having for their interest the development of Florida's industries.

Much of the work of the Station during the past biennium has been conducted for the Federal Government. This has been necessary in the war effort and only such work carried the priorities required to secure materials and to maintain a staff. Among the projects which have been carried on are the following:

No.	Title
4301	A Study of the Properties and Uses for Lime Rock Concrete. Engineering and Industrial Experiment Station Bulletin No. 7 covering one phase of this subject is now available.
4302	Road Stabilization with Lime Rock. Investigation of the incorporation of Lime Rock with sand bases to make more stable road bases.
4303	Acceleration of Concrete and Mortar Setting with Finely Ground Lime Rock. A paper covering the first phase of this work will be published shortly.
4401	Development of a Spray Gun for the Chemical Stimulation of Pine Trees to Improve the Yield of Naval Stores. Field tests are now being conducted with five models built in our shops.
4403	Development of High Grade Ceramic Ware. The purpose of this project is to demonstrate the utility and practicality of establishing a ceramic industry in the State.
4404	Recovery of Tannin from Scrub Oak and Other Sources. Field tests are now being conducted to determine the engineering and economic factors involved.
4405	Natural Florida Sands to Be Used in Sewage Treatment Processes. Collection and classification of the sands are now in progress. Laboratory tests will begin shortly.
4407	Test Road in Cooperation with the State Road Department for Lime Rock Use. Preliminary work has been done in preparation for the laying of several thousand feet of test road on the Gainesville-High Springs road.
4409	Utilization of Wood and Wood Wastes. This project is being carried on in connection with No. 4404, which contemplates the use of the bark of the tree only.

4410 Increase the pH of Sulfite Liquors. It has been found that the waste liquors in Florida do not respond to the same treatment as those of the North. Before anything of value can be removed from these wastes, the acidity must be controlled.

4411 Protein Feed from Waste Sulfite Liquors. A strain of yeast has been reported in England that will produce a high protein feed. This project will attempt to determine whether this strain of yeast can be adapted to Florida conditions to produce a commercial feed from these waste liquors.

4413 Pulp for Paper from Fresh Stumps. Field tests are being conducted to determine the feasibility of recovering usable pulping wood from cut-over land. This project is sponsored by the Office of Production Research Development.

4414 Activation of Florida Minerals to Produce Catalysts for Petroleum Cracking, Oil Bleaching, Water Treatment, and Other Purposes.

2453 War Research. Under this heading several secret projects have been operating for various Federal agencies. The invitation to carry on this work is a recognition of the high standing of the College of Engineering. It is expected that when the results of this work can be revealed, they will demonstrate that a real contribution was made to the war effort.

At the present time, the staff consists of thirty-three full-time workers, together with twelve part-time workers. No research assistants have been employed due to Selective Service regulations, but as soon as conditions permit, this situation will be remedied.

One of the important factors in establishing the Engineering and Industrial Experiment Station at the University was to make more effective use of the facilities of the College of Engineering Laboratories. Equipment is used by the research workers, regardless of which department in the College has title to it. As a result, the Station starts with a fine back log of equipment. However, most research projects will, of necessity, require some special equipment.

PLANS FOR THE NEXT BIENNIUM

In order to fulfill its function, the Station should become the Research Laboratory for industries in the State. In order to accomplish that purpose, some projects will be carried on covering specific problems of particular industries. Such projects will be financed at least in part by contract with the sponsoring industry.

When conditions permit, it is planned to have one or two research assistants assigned to each staff member. This will fulfill a twofold purpose: (a) increase the amount of research that can be done; and (b) provide a source of trained engineering personnel at the graduate level for the industries of the State. At this point, it is interesting to note that two of our staff members are Florida graduates who, after having had experience elsewhere, are now able to turn their talents to the solving of Florida problems.

During the next biennium, the Station hopes to make progress towards:

(1) Solving some of Florida's industrial and engineering problems.
(2) Becoming the research laboratory for Florida's industries.
(3) Training young research men to go out and help industry solve its own problems.

FUTURE PLANS

In order that the Station shall fulfill its function of studying "Engineering Problems Which Affect the Welfare of the State," some more generalized problems are planned.

1. Because of its most southerly location in the United States, Florida receives a larger percentage of solar energy than any other state. Large amounts of money are being expended in other places that are less favorable for this type of study. It is reported that more than $100,000 per year is being spent by the Massachusetts Institute of Technology for the development of solar energy equipment. Studies of that type in Florida are important when it is realized that by proper utilization of solar energy, not only can power and heating devices be developed, but also refrigeration. Work along this line was started several years ago with the publication of Engineering Experiment Station Bulletin No. 5, entitled *Climatic Data for the Design of Air Conditioning Systems in Florida*, and will be continued as soon as manpower again becomes available.

2. In the prewar period, work was carried on in connection with the Navy on hurricane location, (Bulletins Nos. 3 and 6). The new advances in the science of electronics should give a very important stimulus to this work in the postwar period.

3. The University wind tunnel will be used to study the effect of wind velocity on structures. More information on this subject may result in safer homes and lower building costs for Florida.

4. As more industries come into Florida, a better knowledge of water supply and of methods of treating the water for industrial purposes becomes important. Low cost pumping methods should be developed because of the flat terrain.

5. Studies in the field of ultra-high frequency instruments will help to make aviation safer and thus stimulate the location of landing fields in the State.

6. One of the chief difficulties that Florida has experienced, as far as industrial development is concerned, is lack of cheap fuel. Much fundamental research has been carried on in the development of liquid fuels from plant sources. While it appears, at the present time, that this is a higher cost fuel than can be obtained by importing oil or coal, research should be carried along to determine whether or not the cost can be reduced to the point where such fuel manufacture can be economically sound. The first project that should be undertaken in this connection should be designed to develop a fuel for use by farmers and individuals from waste farm materials. This field appears to promise reasonable results, and information in this study might eventually lead to a low cost fuel for other purposes.

7. Because of the relatively high temperatures in Florida throughout the year and the proximity to salt water, corrosion problems are serious. All industries and also individual home construction are affected by the tendency of ordinary materials to corrode. It is planned to initiate a project which would study the rate of corrosion of the usual construction materials and to develop, if possible, methods of minimizing this corrosion.

8. One of Florida's great natural resources is its beaches. Engineering Experiment Station Bulletin No. 4 entitled, *Study of Beach Conditions*, is a start in studying conservation of this great resource. Further work is important to every resident of the State.

9. As a result of work done in "Aerial Mapping" for the armed forces, postwar work in this field can be of great value to the State.

RECOMMENDATIONS

It is regretted that more information cannot be given pertaining to the war activities of the Station, but it may be said that during the past two years,

ninety per cent of the efforts of staff members have been on important war contracts of a secret nature. These same workers, when peace is declared, should be diverted from war work to help solve problems involving Florida's industries. It is recommended that provision be made for keeping these men on our staff.

It is also recommended that every effort be made to secure some of the valuable equipment which will be disposed of through the Surplus War Commodities Corporation and that funds be made available for this purpose.

It is further recommended that funds be made available for continuing the work now being done for postwar cooperation on problems for Florida's industries, and on the development of methods for the utilization of the State's natural resources.

Respectfully submitted,

JOSEPH WEIL, *Director*

REPORT OF THE DEAN OF THE COLLEGE OF LAW

To the President of the University:

SIR: The work of the law faculty has not decreased during the war. Extracurricular activities, as detailed in former reports, have not slackened, and other necessary duties have been assumed. While reduced attendance has enabled us to dispense with some law courses, three professors have taught history and one, mathematics. One has taught Business Law and another Business Units for the College of Business Administration. Three members of the faculty have been members of the State Bar Association Committee on Refresher Courses. All professors being fully employed, it has not been possible to assign any to the preparation of material for refresher courses, or other new courses, although such assignment would be highly desirable. Beginning with the summer of 1942, the faculty has taught two terms of summer school, and the strain of duties throughout the year is inescapable.

In September, 1943, the Assistant Law Librarian, who was also a part-time instructor in law, resigned to accept a position in Washington. The embarrassment of the College was resolved by the transference of the Administrative Assistant and Librarian to full charge of the Law Library and part-time teaching, where she has served with distinction. Professor William A. McRae, Jr., on leave, is at this writing a Lieutenant Colonel with General H. H. Arnold.

ADMISSION AND STUDENTS

Effective February 1, 1943, the requirements for admission to law were reduced to two years of academic college work meeting the requirements of the Association of American Law Schools. The College delayed recommending this step, but so great was the war drain on potential students that for the duration it felt obliged to join the ranks of the great majority of law schools. After receiving the law degree a student may take the additional year of academic work in the combined course and receive an academic degree.

The law faculty recommended that the Florida State College for Women offer a combined academic-law course, the law to be given by this College. This policy has been put into effect, and now women as well as men may take

an academic and a law degree in six years (or less calendar time under the accelerated program). In view of present unprecedented opportunities in law, women now constitute about 22 per cent of the total law enrollment in the country; they constitute about 25 per cent of our enrollment.

The morale of law students in these trying days has been surprisingly high. When it appeared that summer law terms in 1944 would not be feasible at former fees, most of them signed a petition agreeing to attend and favoring a doubling of the fees. So effectively did they promote attendance that twenty-two students attended the first term.

In 1941-42 (exclusive of summer) the College enrolled 100 students; in 1942-43, 57 students, including 3 women; in 1943-44, 26 students, including 7 women. In the summer of 1943, law attendance for the first term was 14; for the second term, 14. In the summer of 1944, law enrollment during the first term was 22; during the second term, 18. Men discharged for physical disabilities from the armed forces are beginning to enter, and it is believed that our enrollment will start to increase.

DEGREES AND HONORS

In 1942-43 twenty law degrees were given, one with honors and four with high honors. In 1943-44 seven law degrees were given. In 1942-43 the first-year student making the highest average was Jacqueline May; in 1943-44, Louis Safer. In 1942-43 the senior making the highest average during the entire course, the work being done entirely in this College, was Ila R. Pridgen. Her average (3.9+) also was the highest in the University for the class graduating May, 1943. Not more than one or two others have made averages approximating this in the history of the College. In 1943-44 the senior making the highest average, as aforesaid, was Robert Bruce Crawford, Jr.

THE WAR AND THE LAW SCHOOLS

In 1936 there were 40,529 law students in the United States. In the fall of 1943 there were 4,803, of whom 2,338 were in thirty-three evening schools. Half of the morning schools had enrollments smaller than ours. Our rank in the South is shown by the fact that we had a larger law enrollment than the state universities of Alabama, Arkansas, Georgia, Kentucky, Mississippi, Missouri, North Carolina, South Carolina, and Tennessee. Eight law schools approved by the American Bar Association had closed, including those of the Universities of Nebraska and Wyoming. Other state university schools were running with very small enrollments. For example, South Dakota had 2 students; North Dakota and Oregon, 7; Idaho, 8; Mississippi, 11; North Carolina, 12; Kansas, 13; and Montana and West Virginia, 14. In addition to keeping their faculties together, schools like the above show their faith in the impersonal, orderly administration of justice and in the training of lawyers by which this is possible.

POSTWAR PROSPECTS

For some time the supply of young lawyers has been virtually eliminated. National policy, unlike that in the First World War, has made no effort for recruitment. The profession is shrinking while we are fighting for law, justice, and liberty. The year following the First World War (1919-20) our law enrollment was 98, and successive enrollments were 115, 154, and 227. After the

present war, we expect these figures to be considerably increased for various reasons: (1) Our enrollment when the war began (1941) was larger than in 1917. (2) The present war will last longer than the last. (3) More of our undergraduates are in the service. (4) The demand for lawyers, due to depletion of supply, will be larger. (5) More liberal rehabilitation of veterans. (6) Requirements for admission to the Florida bar now embrace law school graduation.

LAWYER RECONDITIONING

At the end of the war an effort will be made throughout the country to fit and adjust lawyer veterans for the practice. To this end refresher courses will be given by state bar associations, unless supplanted by courses in approved educational institutions under the Servicemen's Readjustment Act of 1944. Two processes, however, often will be necessary: (1) reconditioning the mind; and (2) bringing it down to date professionally. The former can be best accomplished by residence in law schools. The College hopes to have a part in the mental reconditioning of lawyer veterans.

OTHER SHORT COURSES DISTINGUISHED

War instruction has shown the possibilities of short intensive training for specific objectives. Whether this be mere training or education, in some fields it will have vocational postwar value. But in the legal field it is different. A knowledge of law has little or no vocational value unless one is admitted to the bar. In Florida now, as in most states, one cannot be admitted to the bar unless he is a graduate of an approved law school. One cannot be such a graduate unless at least he has passed two years of academic college work, has studied law in residence for ninety weeks, and has completed ten hundred and eighty hours of classroom instruction. It follows that while special courses profitably may be offered those already admitted to the bar, they will have no vocational value for those not admitted.

RESERVE PERSONNEL

It is reasonable to suppose that the war will end during the next biennium, certainly the war with Germany. Our attendance suddenly may be greatly increased, and we shall be confronted with problems more difficult and onerous than those arising after the First World War. The writer vividly recalls the hectic days of 1926-29, when law attendance in 1927 spiraled to 275, and the teaching and grading of students became most difficult and uncertain. A similar crisis may confront us soon, and provision for reserve personnel is imperative, the appropriation to be used only if necessary.

We should be able to employ, if necessary, a seventh law professor for regular instruction and a full-time assistant law librarian, releasing the Librarian for other duties where most needed. The Servicemen's Readjustment Act of 1944, which allows student veterans to complete their courses, appears also to allow lawyer veterans to take a refresher course at Government expense. If so, there will be a heavy demand on us for this service, necessitating courses in recent law developments in addition to regular undergraduate work. Hence, an eighth professor in reserve is required. A reserve fund also should be set up for clerical assistance. Whatever the difficulty, the legislature should make an appropriation for reserve personnel for this College and for the University to avert the breaking down of the teaching process.

LAW LIBRARY

The Law Library has enjoyed its most successful biennium. In addition to our library appropriation, we have received funds from the General Education Board and from other sources. Under present management, our acquisitions have become more judicious, and library arrangement, order, and auditing have improved.

At the end of the fiscal year, 1944, the Library had 17,879 volumes, of which 3,116 were acquired during the preceding two years. The Library is now valued at approximately $85,000. We now have the codes of forty-four states practically up to date. We have 43 sets of law reviews and expect to get more. Judge Curtis Waller has been sending us briefs of cases in the Fifth Circuit Court of Appeals, and they have been catalogued, as well as student articles in Legal Research. A substantial part of our appropriation goes for continuations, but the assistance received has enabled us to add the following items to our foreign materials: *Law Times Reports; Law Reports* (English); *Session Cases* (Scottish); Halsbury's *Complete Statutes of England; Canadian Abridgment;* and several English, Canadian, and Australian legal periodicals.

Respectfully submitted,

HARRY R. TRUSLER, *Dean*

REPORT OF THE ACTING DEAN OF THE COLLEGE OF EDUCATION

To the President of the University:

SIR: I submit herewith the following report on the activities of the College of Education for the biennium ending June 30, 1944, with recommedations for the coming biennium.

CURRICULAR REVISION

A program leading to the degree of Master of Education was begun in the summer of 1944. This program entailed the adaptation of materials to the professional preparation of teachers in contrast to former offerings for a research degree.

IMPORTANT PROBLEMS AND PROJECTS

The teacher shortage and the need for training emergency teachers constituted the chief problems of the biennium. Postwar planning, the revision of teacher education programs for in-service and pre-service teachers, the production of new basic materials for use in schools, the need for classifying teachers as a basis for salary schedules, the improvement of communities through the schools, and the selection of students have been other major problems. The College has directed its facilities toward the solution of these problems while continuing to attack other educational problems that are constant.

The re-establishment by the State Board of Education, under the laws of Florida, of ninety-five scholarships is a significant contribution to the work of selecting superior students to enter the teaching profession.

Health and Physical Education.—The staff in health and physical education, in cooperation with the public school teachers, developed a physical fitness

program for the public schools of Florida. A Physical Fitness Institute was held in this connection in March, 1943, at the Yonge building.

A text written by staff members, *Teaching Physical Education in the Elementary School,* mentioned in my last biennial report, was adopted as the State course of study in elementary physical education.

The Bureau of Educational Research.—The Bureau completed several projects and issued reports in the following series of bulletins:

1. *Institutions Offering Post-Graduate Study in Off-Campus Centers*
2. *Commodore Matthew Calbraith Perry and the Opening of Japan*
3. *Materials on Education, War and Post-War Conditions*
4. *A Program of Action to Remedy the Teacher Shortage in Florida*
5. *The P. K. Yonge Laboratory School. A Bibliography on the History, Program, and Work of the School, 1934-1944.*

The Bureau sponsored two state-wide conferences, one dealing with the impact of war upon civilian life and education, and the other with the teacher shortage. Reports of the conferences were published in bulletin form.

The P. K. Yonge Laboratory School.—Increased interest in education, particularly in the summer, among younger students maintained attendance figures and added to enrollment. Older students doubled their efforts to complete their educational programs. Superior students completed accelerated programs. Graduates and former students of the School earned enviable records: over one hundred and fifty are in the armed forces and during the past year the ninth student was elected to membership in Phi Beta Kappa since the School opened in September, 1934. Emphasis during this wartime period has been placed on science, mathematics, and physical training, but not to the neglect of a well-balanced, enriched, instructional program for all grades.

The Florida Curriculum Laboratory.—The Laboratory has continued its services to students in the College, to teachers in service in the State, and to professional groups working on specific problems. Requests have come from all sections of the State for the use of materials housed in the Laboratory. Publications now on the shelves exceed 16,000, of which approximately 9,000 are books for pupil and professional use.

The Inter-American Education Demonstration Center.—The Center has supervised the use of Inter-American content materials in schools requesting the service. Planning for the peace through evaluation of present curriculum materials for the schools of Florida and the creation of new materials are major activities.

The University of Florida Project in Applied Economics.—The work of the Project for the period may be summarized as follows:

Prepared and published forty-six publications related to housing or teacher education and housing.

Cooperated with three experimental schools in housing.

Assisted in the development of demonstration centers for the teaching of food, clothing, and housing at McIntosh, Auburndale, and Lake Butler.

Conferred with representatives of eighteen out-of-state colleges and universities and interpreted the Project to them.

Assisted in in-service education programs of the State Department of Education and in selected counties through participation in demonstrations, planning conferences, and workshops.

Cooperated with the University of Kentucky and the University of Vermont in diffusing ideas sponsored by similar projects in applied economics.

Answered requests for publications of the Project from all over the United States and three foreign countries. In making this service available, several thousand publications have been distributed.

Bulletins and Releases.—The College published as a bulletin, *Living and Learning in the Elementary Grades,* which was issued in February, 1943. This study of the elementary grades of the P. K. Yonge Laboratory School was distributed to Florida public schools gratis, and almost a hundred copies were sold to schools in all parts of the nation in response to their requests.

A number of releases, chiefly designed for teachers, have been distributed in mimeographed form to Florida schols. They cover such subjects as "A Wartime Christmas Program," "The English Program in Time of War," "Home Nursing in the School Program," "Egypt of Long Ago," "Milk Makes a Difference," "Suggestions for a Wartime High School Mathematics Program," "Elementary Weaving, Basketry, and Paper Jewelry," "For These We Fight," "Developing Good Speech in the Young Child," "Inflation Control: A Community Responsibility." The District Office of Price Administration requested permission to duplicate and distribute 8,000 copies of the last-named release to the schools of Florida.

The Inter-American Education Center released "Summer Reading and the Americas," copies of which were distributed by the U. S. Office of Education to all other Centers under its supervision, and "A Llama Gets a Name," which was widely distributed by the Office of the Coordinator of Inter-American Affairs.

NEW FACILITIES

All libraries of the College received many important additions.

Field Work.—During 1943-44, the College provided a full-time consultant in health and physical education to assist in organizing and conducting the physical education program in Florida public schools. The State Department of Education cooperated by furnishing travel allowance.

In agricultural education two itinerant teacher-trainers have assisted in supervising the agricultural departments in Florida high schools. There were 4,167 students of vocational agriculture enrolled in the State during the school year 1942-43, producing an income in that year of $564,030.81.

The Librarian of the Yonge School worked closely with the public schools in organizing libraries, furnishing lists of books for purchase, and instructing teachers in the use of the libraries in their schools.

The Inter-American Education Center sponsored two all-state projects for Pan-American Day celebrations and a series of radio broadcasts for children and teachers; it also conducted nine lectures to civic organizations and engaged in numerous community projects.

The College and the Laboratory School have done much work with schools in Alachua and adjoining counties. A staff member spent one day each week for a semester in the schools of four counties, assisting with the solution of school and community problems. An effective workshop program was held in Madison County and was followed up by weekly conferences.

FACULTY PERSONNEL

Three members of the College staff resigned during the biennium to accept important civilian positions; two of these posts have been filled. Four members of the College staff are on leave—two are serving in the Navy and two are on special wartime government service. Three members of the Laboratory School staff are on military leave.

Twelve members of the College and Laboratory School staffs taught in the University's war training programs; one served as director of the programs; and two served as chairmen of courses.

Two members of the College faculty received the degree of Doctor of Philosophy during the period under review.

RECOMMENDATIONS

I submit the following recommendations for the coming biennium:

1. That two full-time workers, one in elementary and one in secondary education, be assigned to field service.
2. That the professional degree of Doctor of Education be granted by the College of Education and that, since it is purely a professional degree, the degree of Master of Education be transferred to the College of Education. There are great possibilities for leadership in Florida, and it becomes the duty of the College to train workers for this service.
3. That the College be authorized to offer courses for county superintendents and supervisors in service, the courses to be two weeks in length, to be held at regular intervals throughout the year, and to deal with pertinent problems of office.
4. That the College be empowered to enroll students who have not completed the General College provided they have completed sixty-four semester hours of college work.
5. That the College be permitted to give a limited amount of credit by examination.
6. That the Yonge School be permitted to administer adjustment examinations to mature persons over twenty-one years of age for college entrance, and that students qualifying under these examinations be graduated from the Yonge School.
7. That certain students be allowed to register concurrently in the College of Education and in one other college on the campus, and that upon completion of all requirements for a degree in the College of Education, the student be graduated without completing the additional thirty semester hours now required under the by-laws of the University for the second degree.
8. That at least ten scholarships of a minimum of $500 each be set up for training students for the office of county supervisor.
9. That the consultative service in health and physical education, established as an emergency measure, be continued on a part-time basis under the Field Service division of the College.
10. That the College be allowed to established exchange scholarships with foreign countries for students preparing to become elementary or secondary school teachers.

WAR ACTIVITIES

Emphasis has been placed on the in-service education program, in order to train new teachers called in to meet the teacher shortage in public schools;

on preparation and distribution of materials on pertinent wartime problems; on courses dealing with first aid, home nursing and care of the sick, health education, and physical fitness.

The staff of agricultural education has trained all available students for agricultural teachers and has placed them immediately in high schools. The staff has also supervised forty-four teachers of Food Production War Training classes for out-of-school youth and adults. These classes offered instruction in repair of farm machinery, woodwork, canning, and preserving.

The Graduate Council permitted the Department of Education, under certain conditions, to offer graduate courses in education at Jacksonville, Florida, as an emergency measure.

The Yonge School pupils assisted in war drives; the teachers in the School assisted with rationing.

Respectfully submitted,

G. Ballard Simmons, *Acting Dean*

REPORT OF THE DEAN OF THE SUMMER SESSION

To the President of the University:

Sir: The enrollments in the Summer Sessions of 1943 and 1944 did not reach the high levels of prewar years. This was so expected for most of the men students were in the military service and most of the women students were either in the same service, or had during the summer months gone into employment other than teaching. After the war this will no doubt change and enrollments will again be large. It does not seem, therefore, that the low enrollments of the past biennium constitute a major problem at this time.

Despite the low enrollments, it has been possible to maintain the same high quality of instruction and course offerings as of previous years. Wherever reductions have been necessary, we have merely eliminated some of the sections into which the larger courses were divided and abandoned a few courses that never drew many students even in prosperous years.

In particular it may be said:

1. That the usual two six-week terms, six days a week, have been maintained each summer.

2. That in May of 1943 a special presummer session term of three weeks was held for the benefit of those teachers who, due to teacher shortage in the so-called "emergency," had been called suddenly into teaching. This short term consisted entirely of those courses that are sometimes spoken of as "refresher" courses.

3. That in April and May of 1944 a more ambitious program was offered consisting of a full six-week term. This term was initiated primarily for the benefit of those teachers of the State whose schools close early and who, we thought, might find it convenient to spend the time in additional preparation.

4. That during the usual June to September session a few short courses of three weeks' duration were offered each year for the special benefit of those teachers who could not attend a full six-week term. Most notable among these was a short course by the noted teacher and author, William Heard Kilpatrick, of Columbia University, on The Foundations of Education. Other short courses were: (1) Curriculum Construction; (2) Guidance for Teachers and Administra-

tors; (3) Special Wartime Problems of Administrators; (4) New Problems in Global Geography; (5) A Clinic for Athletic Coaching; and (6) A Special Workshop for Individual School Groups.

5. That a course for teachers of handicapped children was offered the second term of 1944. This course was made possible by a bequest of $425.00 from the Florida Society for Crippled Children. It was taught by Mrs. Agnes Howe of Jacksonville.

6. That each year a few outstanding teachers from other institutions were brought to the University, a policy which makes it unnecessary for our students to go out of the State to receive instruction from such teachers.

Thus it may be seen that the Summer Session has continued its service as well perhaps as could be expected under adverse circumstances.

A New Master's Degree.—During the past year you will recall you appointed a committee to make a study of special offerings for teachers during the Summer Session. After painstaking study this committee recommended a new master's degree for teachers. This recommendation was duly submitted to the Graduate Council and it was agreed to offer the new degree under the title of Master of Education. The committee felt that the requirements for the new degree are much more in accord with the needs of teachers than are those for the old Master of Arts in Education degree—the degree that has been offered now for many years. The old degree stressed research. The new degree will stress competence in teaching and school administration. The new degree, it is felt, is much more a professional degree than was the old degree.

A number of students began their graduate work according to this plan in the summer of 1944 and at least some of them, perhaps all of them, are well pleased thus far. Those of the faculty who have been closest to the operation of the new plan have been high in their praise of its success. Since the residence requirements are such that no one can finish his work for the new degree before the summer of 1946, final judgment must of course be withheld at this time. We feel confident, however, that many teachers and school people will find the new requirements more responsive to their needs than were the old.

The Quarter System.—As soon as war was declared, acute need was felt by the colleges and universities of the nation for making use of all available time and resources. To do this many of these institutions have found it expedient to change their administrative setups, so as to make better use of the time from June to September. Much experimentation has gone on and several plans have been tried. Many that had plans similar to ours have changed to something else, but none that had something different has changed to our plan. The two most popular plans seem to be the three-semester plan and the four-quarter plan. The engineering schools seem to favor the former, the state universities the latter. The trend seems definitely toward the quarter system. The United States Office of Education, Maude Farr reporting, states that over half of the fifty-two land grant institutions are now operating on the quarter system.

During the biennium a committee appointed by you for the purpose has been working on the problem of a better coordination between winter and summer sessions. The committee has, you will recall, submitted to you a recommendation that the University adopt the four-quarter system. The committee recommends that this change go into effect in the fall of 1945. The recommendation of the committee has not yet been acted upon by the University Council, the Senate,

and the Board of Control, and of course we do not know that it will be approved. If it should be approved it will mean that the Summer Session of 1945 will be administered as in the past while that of 1946 will be administered differently. The change to the quarter system, we confidently believe, will be for the best, and it is so recommended in this report.

THE SUMMER SCHOOL OF TRADE AND INDUSTRIAL EDUCATION AT DAYTONA BEACH

The Summer School of Trade and Industrial Education at Daytona Beach reports "two of its most profitable years in 1943 and 1944." As everywhere else its enrollment was cut in half or more, but it has nevertheless been able to render a valuable service, for in every center in Florida where war production training courses were offered large numbers of instructors entered the service. Others were tempted by high salaries back into industry. All these had to be replaced by new teachers. Courses at the School were pointed directly toward the individual needs of the new instructors, with the result, so the Director thinks, that little time or effectiveness was lost through replacement. The whole State program would without doubt have been weakened without this aid to these new teachers. Indeed, the Director of the School thinks that "we accomplished more for the public good during these past two years than we did during the prewar years." This is doubtless correct, and it seems the School has rendered a valuable service during the biennium.

All in all then it may, I think, truthfully be said that despite certain handicaps good work has been done in the Summer Sessions during the biennium.

Respectfully submitted,

J. W. Norman, *Dean*

REPORT OF THE DIRECTOR OF THE SCHOOL OF ARCHITECTURE AND ALLIED ARTS

To the President of the University:

Sir: I submit herewith the biennial report of the School of Architecture and Allied Arts for the period ending June 30, 1944.

In General.—While Architecture is not a military subject, graduates of this School upon becoming officers in the Army and Navy have, nevertheless, been placed in charged of building projects with notable success therein and have served in many fields with distinction. This is evidence of the soundness of the method of teaching which we follow.

We have several foreign students: one from Chili in Painting; and two from Turkey and one from Cuba in Architecture. During the biennium, 162 were enrolled in the Lower Division; 74, in the Upper Division. Fourteen students were graduated.

Curricular Revision.—We have maintained our general scheme of instruction which is called the "project method." During the war we have made no changes in the curriculum except to change some of the subjects of the projects. This method allows considerable flexibility without destroying the general framework. In the postwar period, the project method will also permit special

problems to be arranged to meet the particular requirements of returned veterans, many of whom may desire to take special preparation to fit them for their particular field of endeavor.

New Equipment.—During the biennium we have acquired 434 lantern slides, comprising both colored and standard slides of architecture and painting. Other equipment acquired has included a silk screen painting outfit and a Professional Reproduction Outfit. Two hundred and seventy-six books have been added to our Book Room, ninety-three of which were gifts.

Gifts.—This biennium, Mr. C. Edward Vosbury, architect from New York, now a resident of Clearwater, Florida, presented the School with over 2,000 copies of technical architectural magazines and eighty-eight books. Three books were received from Lloyd Flood, a graduate of our School, and two books from Director Weaver. These gifts will help to build up the rapidly growing Library of the School, which now contains over 2,400 volumes and many complete and partially complete editions of technical periodicals in the fields of architecture. Sixteen etchings and lithographic prints have been received from the Associated American Artists and from the Miniature Print Society, of which our School is a member.

Exhibitions.—It has been our policy to bring to the University a continuous series of exhibitions from various parts of the United States in order to enrich the artistic background of the student body and the general public. These include oil paintings, water colors, etchings, lithographs and colored reproductions of great paintings. During the past year we also presented an excellent exhibition of bronze sculpture. We have at least one exhibition each month.

Faculty Personnel.—During the biennium, changes in the faculty have been frequent, until at present we have four members of the faculty on leave and one resignation. One member is a Major in the Infantry, U. S. Army; one, a Lieutenant in Camouflage; one, a Lieutenant in the Navy; one is in the Art Division of the Navy; and one has resigned to do postwar architectural planning in New York City.

Recommendations.—The Architectural Book Room, as above stated, has over 2,400 volumes and is badly in need of an attendant to take care of these books and magazines, to issue them to students, and to put them in their proper places. This attendant could well be a young person hired at a relatively small salary.

It is also desirable to have one additional small office in Peabody Hall for an instructor.

It has long been desirable to have a large room, such as the original college library room in Peabody Hall, where there could be a permanent exhibition of drawings and paintings, both as a place for study and as a center where the general student body might go for cultural instruction. Such a room would not only serve this School, but would serve the uses of all the students in the General College, and the exhibitions could run parallel to the courses in the Humanities.

Respectfully submitted,

RUDOLPH WEAVER, *Director*

REPORT OF THE DEAN OF THE GENERAL COLLEGE

To the President of the University:

SIR: I beg to submit the following biennial report of the General College for the years 1942-1943 and 1943-1944.

From the very beginning curriculum development and improvement has been one of our most important tasks. Certainly in this period of rapid change it becomes a continuous responsibility. The General College curriculum is a program of studies in which the principle of guidance is dominant during the first two years a student spends at the University. At the beginning of the war period, the immediate needs of students became the dominant ones. A student was permitted to elect any special subject or program that might be of immediate use after he entered the armed forces. However, perhaps because they could see that the Army Specialized Training Program had many points in common with our civilian program, many students continued in the regular work. During every semester of the war period, the civilian enrollment in each of the comprehensive courses has been large enough to warrant several sections.

We have called the work of the General College *General Education,* and so it is, but it is probably better to look at the work of the first two years as basic preparation. From many sources, perhaps even from our University bulletins, a student often gets the impression that he must devote two years to general education before he is permitted to begin his professional work. No such separation exists. A student starts toward his professional objective, if he has one, the first day of college. But he is not badgered to choose; he is allowed to make a choice. It is unfortunate that the opposite attitude is found in certain organizations and communities, since it usually forces a boy to "guess" instead of "deciding" about his life's work. Then there is subsequent change and loss. A liberal education to us is not one that crams a student with certain facts of the arts or philosophy as disciplines, but one that helps him understand himself and the civilization of which he is a part. We follow the dictum that philosophy finds itself when it ceases to bother about the problems of philosophers and concerns itself with the affairs of men.

Certain of our key faculty members are in the armed forces on official leave. These are officers, and according to official announcement, they probably will not be discharged as rapidly as non-commissioned men. We shall have a critical problem, therefore, if these instructors are not returned to us in time to help with the large numbers of returning students. The temporary faculty that we might piece together to substitute would be wholly inadequate to meet the problem. Further, in all probability some of our instructors will not return. One is a Lt. Colonel in the Engineering Corps, another is a Major in artillery, yet both were receiving less than $2500 per year from the University when they entered the service. So our greatest problem just now is only an old one become more acute—finding and keeping instructors who can teach the comprehensive courses. In the past a number of well-qualified men became workers in one of the subject areas and trained themselves in service. However, such men are in demand everywhere. High salaries and promotions are offered by other universities. Thus, building and keeping together a unified staff is a difficult problem in the Lower Division.

Upon its organization, the General College made a definite break with many old procedures and practices of the hide-bound academic groups. Now there is

quite a tendency on the part of certain individuals and some university-wide units to standardize such items as *class attendance, credits, reports, tests, examinations,* etc. Reducing all these things to a common denominator may make for efficiency in getting the "work" (paper-work) done, but it is questionable from an educational point of view. Adjustments may be needed, but it is to be hoped that the several subject area groups now working in the Upper Division may be influential in bringing about the desirable Upper Division changes.

No claims are made that we can foresee the future course education will take in America. As all others, we do not know, but we are organized to go forward. Probably the old idea of a liberal education will be as inadequate as the extreme views we hear today in vocational education in meeting the need of the future. We are attempting a new synthesis.

The past eight years make up our trial period. During this period we have seen many colleges and universities of the country undertake programs of general or basic education. Our procedure is still an experimental one, as all true education is experimental as far as the individual is concerned, but we try to keep the proper emphasis on adjustment and change as a result of experiment or experience. Our experience and success during the trial period will enable us to take future steps with more confidence and with a minimum of loss.

Respectfully submitted,

WINSTON W. LITTLE, *Dean*

REPORT OF THE DEAN OF THE GENERAL EXTENSION DIVISION

To the President of the University:

SIR: I submit herewith my twelfth biennial report covering the period July 1, 1942, to June 30, 1944.

The General Extension Division, seeking to integrate its program into the lives and needs of the people of Florida, has kept its resources fluid to meet constantly changing conditions. For rapid adjustment, techniques have been developed which afford ready shift from one emphasis to another.

The Division, therefore, required no complicated re-tooling to convert to a war program: Materials were satisfactory, tools were ready, skills were proven. It was necessary only to shift patterns. With more materials, more tools, and adequate manpower, we could have done a bigger job.

Conversely, when the time comes for reconversion to a peacetime economy, the Division will be able to make the change with maximum readiness.

A complete record of the activities of the General Extension Division appears in the attached tables, while the current significant projects are discussed in the following paragraphs.

GIVES EXTENSION COURSES TO SERVICE MEN AND WOMEN

Around the world, 2,278 men and women in the armed forces have enrolled for extension courses from the University of Florida.

Service personnel can select from 353 college and high school courses offered by the General Extension Division at reduced cost, since Florida was one of the

first states to subsidize correspondence study for members of the armed forces. Two-thirds of these courses are also offered through the United States Armed Forces Institute under a plan by which the Army or Navy pays half and the student half.

In the early months of the war, the majority of armed forces registrations were in mathematics, physics, engineering, geography, and the modern foreign languages, subjects which were of military value. The trend now indicates that service men and women are thinking about what they are going to do when they get out of uniform.

The registration figure for the armed forces includes enrollments in correspondence study, and in special classes for members of the Military Police and Shore Patrol and for military personnel in charge of water and sewage treatment plants at Florida installations.

COOPERATES WITH THE WAR DEPARTMENT AND THE MILITARY DEPARTMENT OF FLORIDA

Accepting the obligation of the University to help Floridians prepare themselves for the full responsibility of citizenship, the Division cooperated with the War Department for twenty years prior to World War II by enrolling young men in the Citizens Military Training Camps. Thousands took the red, white, and blue courses, and several hundred are now serving as officers and non-coms.

Prior to Pearl Harbor, at the request of the Adjutant General of Florida, the Division registered civilian workers for Selective Service during construction of Camp Blanding. With the cooperation of the ROTC unit of the University, men were registered on the job, and 200,000 vitally important work hours were saved.

Later, to assist with the recruiting program for the current emergency, War Information Committees were set up throughout the State to acquaint young men and their parents with the war aims and opportunities offered by the armed services.

The Adjutant General has expressed appreciation of the Military Department of Florida

> "... for your fine cooperation and help before and throughout the present military emergency. Through your personnel procurement in Florida for Citizen Military Training Camps for the past twenty years, a large pool of potential officers was available at the outbreak of war. Many of our best National Guard Officers came from this reservoir. Your cooperation in the registration of civilian workers at Camp Blanding, and in setting up War Information Committees to assist in the recruiting program was of particular value to our Selective Service System."

ASSISTS THE STATE DEFENSE COUNCIL OF FLORIDA

The Dean of the General Extension Division has continued to serve as Coordinator of Training by appointment of the Governor at the request of the State Defense Council of Florida, and as special adviser to the Office of Civilian Defense.

The Division has continued its program of training for civilian defense leaders and instructors throughout the State. A total of 3,094 persons were instructed in Defense Council Organization and Administration, Chemical Warfare Agents and First Aid, and Control Center Operation. Special attention

was given to the work in the coastal cities because of their vulnerability and consequent need.

Defense Councils have turned to the Division for motion pictures, posters, discussion materials, and various other teaching aids and services which have helped to improve their local programs.

PROMOTES VICTORY CORPS AND WAR RECORDS PROJECTS

Officers of the ROTC volunteered their services through the Division to assist in training high school units of the Victory Corps. This activity was in cooperation with the State Department of Education.

A Florida War Records Project was sponsored by the Division to assemble pictures, letters, trophies, and interesting information which may eventually become a part of a State collection.

HELPS CREATE INTELLIGENT PUBLIC OPINION

An earnest effort has been made to help create an intelligent public opinion by channeling the war aims and plans of the administration to the people of Florida. Off-campus circulation of the materials of the University War Information Center was handled by the Division. Publicly owned motion picture machines in the State were focused on the emergency, and a reported audience total of more than 2,000,000 people saw the films circulated by the Division for departments and agencies of the Government.

In addition to films, Extension package libraries, books, lantern slides, pictures, prints, maps, charts, graphs and posters on general subects as well as on war information were lent to service centers, convalescent centers, field hospitals, Army camps, naval air stations, Coast Guard units, and the Red Cross for the benefit of those in the service. War production plants and civilian groups also used these materials, and hundreds of teachers employed them to vitalize their school programs and to offset war tension.

AIDS IN SOLVING TEACHER SHORTAGE

To relieve the war shortage of good teachers, professional courses were given in class centers and by correspondence study to help emergency teachers qualify for classroom jobs, and to enable experienced teachers to train for administrative responsibilities, renew certificates, or work towards college degrees.

ESTABLISHES PUBLIC SERVICE TRAINING CENTER

A Public Service Training Center was established to offer courses to municipal, county, and State employees. At present emphasis is placed on work for the agencies engaged in the protection of life and property. Old employees are being upgraded, and recruits replacing persons who have gone into the armed forces are being trained.

Already 3,397 auxiliary and regular police, railroad and special officers, Military Police, and Shore Patrol have taken the course in Basic Law Enforcement which the Division has given in 56 police schools.

Communities all over the nation have written for permission to use the manual and other text materials developed by the Division especially for these schools.

A course for waterworks and sewage plant operators was well attended,

and there is considerable interest in courses being developed for public health employees.

CONDUCTS SHORT COURSES ON WAR PROBLEMS

Since the war began, the Division has conducted short courses in cooperation with agencies and groups particularly interested in the social problems accentuated by the war, including juvenile protection, social welfare, health, sanitation, safety, and other specific areas of public good.

The Conference on Coordination of War Time Law Enforcement Activities was the most important of this biennium. Federal, State, county, and municipal law enforcement officers, representatives of the armed forces, and members of the State Defense Council threshed out problems which confronted them in Florida, and made over-all plans for close-knit cooperation.

The short course program during the biennium was seriously curtailed because of travel restrictions and lack of housing facilities.

CONCLUSION AND RECOMMENDATIONS

The great postwar challenge for adult education is conceded. The responsibility of the University through extension is fixed, and the nature and extent of the work are expressed in the directives of the Florida statutes. The University constitutional organization of the Division is adequate.

We must accept the challenge and expand to meet the needs of Florida. We must defend the field, in the interests of economy and efficiency, against exploitation and usurpation by old or new State agencies.

Therefore, it is recommended that the General Extension Division programs of education and service to Florida adults be adapted, improved, and enlarged as quickly as possible. The directive staff is loyal and experienced, and at Camp Roosevelt was proved competent to handle all the essential programs of any size. Its members have the techniques and methods, and are expert with the tools and media. If the State will give us the materials and manpower, we will do the job.

To upgrade our people for greater proficiency and productiveness, programs will be increased in number. To the many already begun for such groups as business and professional men, labor, women, welfare workers, teachers, and government employees will be added those for alumni, veterans, and others.

To teach Floridians to live democratically—to understand and to help solve the problems of human relations accelerated by the war—more definite plans and schedules of instruction will be made to help churches, civic groups, clubs, and other organizations.

To contribute towards the development of better government, we shall increase our service to government officials and employees, and promote better citizenship.

To activate the people's interest in democratic government and to encourage them to accept their full responsibility for citizenship, we shall greatly increase our effort to create an intelligent public opinion.

This Division will continue to initiate and carry on the extension work to be done in cooperation with government officials and employees. To supply information on request from government officials on practices and procedures in public administration, we need to revive our Legislative Reference Bureau, cooperating with the Department of Political Science and the College of Law.

Eight out of ten universities doing government research recognize the responsibility of their departments of political science in this connection. We also recognize the prerogatives of the Department of Sociology, and will work with it in handling information on social problems and social administration.

Through our Public Service Training Center, we shall continue to train government employees and to produce the essential manuals and handbooks, going directly to the various colleges and departments for the necessary assistance.

To implement all programs, we must greatly increase the amount of work to be offered in short courses, conferences, classes, and correspondence study. Courses must be re-evaluated and re-planned with new emphases and objectives in the light of recently developed knowledge, relationships, and experiences.

In all of our planning, we shall keep in mind that there is need for new concepts by which people may interpret the modern world, need for releasing the enormous knowledge in new areas, and need for developing new social attitudes.

Town halls, forums, and discussion groups must be organized, and schools for government and community leaders in these activities must be conducted—in keeping with the expressed interest of the Governor-Elect.

To organize and administer this work, it is recommended that a specialist in the language arts be appointed to take the place of the head of the Department of Auditory Instruction, long deceased.

To transfer information and ideals to the masses on the proper levels, we must build a greater collection of teaching aids designed for interpretation, simplification, and illustration in adult education. We must include materials for the instruction of school and adult groups interested in special fields.

To build this collection properly and to guide its effective use, it is recommended that the Department of Visual Instruction now be given its own separate head.

The Head of the Department of Information and Service, responsible for all of the extension library activities, recently resigned and must be replaced.

Also, a number of faculty men should become associated with the Division, not only to write courses, but to do specialized jobs.

Specific details for the development of programs and budgetary needs are presented to the President in "Post War Plans for Adult Education to be Carried On by the General Extension Division."

TABLE I.—CORRESPONDENCE STUDY

County	No. Enrollments	Towns Represented in Enrollment
Alachua	363	Alachua, Archer, Campville, Gainesville, Hawthorne, High Springs, Melrose, Newberry, Waldo
Baker	31	Glen St. Mary, Macclenny, Olustee, Sanderson
Bay	99	Bay Harbor, Millville, Panama City, St. Andrew, Southport, Tyndall Field, West Bay
Bradford	72	Brooker, Graham, Hampton, Lawtey, New River, Starke, Theressa
Brevard	24	Banana River, Cocoa, Melbourne, Titusville
Broward	44	Dania, Deerfield Park, Eau Gallie, Fort Lauderdale, Hollywood, Pompano
Calhoun	51	Altha, Blountstown, Clarksville, Frink
Charlotte	4	Punta Gorda, Murdock, South Boca Grande
Citrus	23	Crystal River, Floral City, Inverness, Lecanto

TABLE I.—CORRESPONDENCE STUDY, Continued

County	No. Enrollments	Towns Represented in Enrollment
Clay	57	Camp Blanding, Doctor's Inlet, Green Cover Springs, Middleburg, Penny Farms, Russell
Collier	15	Collier City, Everglades, Immokalee, Marco, Naples
Columbia	60	Fort White, Lake City, Lulu
Dade	305	Coconut Grove, Coral Gables, Goulds, Hialeah, Homestead, Kendall, Miami, Miami Beach, Richmond, South Miami
DeSoto	23	Arcadia, Fort Ogden, Nocatee
Dixie	21	Cross City, Fletcher, Old Town, Shamrock
Duval	355	Arlington, Atlantic Beach, Dinsmore, Jacksonville, Jacksonville Beach, Mandarin, Maxville, Mayport, Neptune Beach, South Jacksonville, Yukon
Escambia	216	Barth, Bay Springs, Bluff Springs, Cantonment, Century, Gonzales, McDavid, Molino, Myrtle Grove, Pensacola, Warrington
Flagler	7	Bunnell, Espanola
Franklin	26	Apalachicola, Carrabelle, Camp Johnson
Gadsden	28	Chattahoochee, Concord, Greensboro, Havana, Quincy
Gilchrist	10	Bell, Trenton
Glades	4	Moore Haven
Gulf	18	Port St. Joe, Wewahitchka
Hamilton	45	Jasper, Jennings, White Springs
Hardee	41	Bowling Green, Fort Green, Gardner, Limestone, Wauchula, Zolfo Springs
Hendry	13	Clewiston, LaBelle
Hernando	19	Brooksville
Highlands	42	Avon Park, DeSoto City, Hendricks Field, Lake Placid, Lorida, Sebring, Venua
Hillsborough	235	Brandon, Dover, Limona, Lithia, McDill Field, Plant City, Port Tampa, Riverview, Ruskin, Seffner, Tampa, Thonotosassa
Holmes	139	Bonifay, Dady, Esto, Noma, Ponce de Leon, Westville
Indian River	90	Fellsmere, Sebastian, Vero Beach, Wabasso, Winter Beach
Jackson	131	Alford, Bascom, Campbellton, Compass Lake, Cottondale, Graceville, Grand Ridge, Greenwood, Kynesville, Malone, Marianna, Sneads
Jefferson	35	Aucilla, Drifton, Lamont, Lloyd, Monticello, Wacissa
Lafayette	34	Day, Mayo, Steinhatchie
Lake	56	Altoona, Clermont, Eustis, Groveland, Howey-in-the-Hills, Lade Lake, Leesburg, Mascotte, Mount Dora, Mineola, Tavares, Umatilla
Lee	35	Alva, Bonita Springs, Fort Myers, Sanibel, Tice
Leon	147	Chaires, Camp Gordon Johnston, Missosukee, Tallahassee
Levy	53	Bronson, Cedar Keys, Chiefland, Gulf Hammock, Montbrook, Morriston, Otter Creek, Williston, Yankeetown
Liberty	41	Bristol, Hosford, Orange, Rock Bluff, Telogia
Madison	58	Ebb, Greenville, Lee, Lovett, Madison, Pinetta
Manatee	40	Anna Maria, Bradenton, Cortez, Long Beach, Manatee, Myakka City, Palmetto, Parrish
Marion	116	Camp Roosevelt, Citra, Dunnellon, Fort McCoy, Fairfield, Lynne, McIntosh, Ocala, Ocklawaha, Reddick, Silver Springs, Sparr, Summerfield, Weirsdale
Martin	15	Jensen, Jensen Beach, Indian Town, Stuart
Monroe	40	Key West, Marathon
Nassau	44	Callahan, Fernandina, Hilliard, Yulee
Okaloosa	114	Baker, Crestview, Eglin Field, Holt, Laurel Hill, Mary Esther, Milligan, Niceville, Valpariso
Okeechobee	28	Basinger, Okeechobee
Orange	107	Apopka, Gotha, Maitland, Orlando, Pine Castle, Plymouth, Winter Garden, Winter Park

TABLE I.—CORRESPONDENCE STUDY, Continued

County	No. Enrollments	Towns Represented in Enrollment
Osceola	16	Holopaw, Kissimmee, Narcoossee, Saint Cloud
Palm Beach	103	Azucas, Belle Glade, Boca Raton, Boynton, Camp Murphy, Canal Point, Chosen, Delray, Delray Beach, Jupiter, Lake Harbor, Lake Worth, Pahokee, Palm Beach, South Bay, West Palm Beach
Pasco	40	Dade City, Elfers, Lacoochee, New Port Richey, Odessa, San Antonio
Pinellas	85	Clearwater, Clearwater Beach, Crystal Beach, Dunedin, Largo, Pass-A-Grille, Pinellas Park, Saint Petersburg, Tarpon Springs
Polk	104	Alturas, Auburndale, Babson Park, Bartow, Davenport, Dundee, Fort Meade, Florence Villa, Frostproof, Homeland, Lake Alfred, Lakeland, Lake Wales, Mulberry, Nichols, Pierce, Polk City, Winter Haven
Putnam	77	Crescent City, East Palatka, Edgar, Florahome, Grandin, Hollister, Johnson, Palatka, San Mateo, Welaka
St. Johns	60	Hastings, Saint Augustine
St. Lucie	26	Fort Pierce, Walton
Santa Rosa	72	Bagdad, Jay, Harold, Holly, Milton, Munson
Sarasota	35	Bee Ridge, Englewood, Laurel, Sarasota, Venice
Seminole	30	Chuluota, Geneva, Lake Monroe, Longwood, Oviedo, Parola, Sanford
Sumter	31	Bushnell, Center Hill, Coleman, Oxford, Sumterville, Wildwood
Suwannee	61	Branford, Live Oak, O'Brien, Wellborn
Taylor	40	Foley, Perry, Shady Grove
Union	49	Lake Butler, Dukes, Raiford, Worthington
Volusia	89	Barberville, Daytona Beach, DeLand, DeLeon Springs, Holly Hill, New Smyrna, New Smyrna Beach, Oak Hill, Ormond, Osteen, Pierson, Port Orange, Seville
Waukulla	27	Crawfordville, Saint Marks, Sopchoppy, Waukulla
Walton	110	Darlington, DeFuniak Springs, DeFuz, Freeport, Lakewood, Mossy Head, Red Bay
Washington	133	Caryville, Chipley, Crystal Lake, Millers Ferry, Vernon, Wassau
Out of State:		
Other States	1,725	Alabama, Arkansas, Arizona, California, Colorado, Connecticut, Delaware, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, Utah, Washington, West Virginia, Wisconsin, Wyoming
Dist. of Columbia	24	
Islands and Dependencies	2	Puerto Rico
Foreign Countries	17	Bahama Islands, Canada, Cuba, Paraguay, Venezuela

DISTRIBUTION

504 towns in 67 counties	4,762
44 other states	1,725
District of Columbia	24
1 Dependency	2
5 Foreign countries	17
Total	6,530

TABLE II.—EXTENSION CLASSES

County	Enrollments Formal	Enrollments Informal	Class Centers
Alachua	49	53	Alachua, Gainesville, High Springs
Brevard		95	Cocoa, Melbourne, Titusville
Broward		100	Ft. Lauderdale
Clay		700	Camp Blanding
Columbia	19	75	Lake City
Dade		522	Coral Gables, Hialeah, Miami, Miami Beach, Miami Shores
Duval	354	125	Jacksonville, Jacksonville Beach
Escambia	48		Century, Pensacola
Flagler		34	Bunnell
Hamilton		25	Jasper
Hendry		20	Clewiston
Hillsborough		387	Tampa
Holmes	22		Bonifay
Indian River		48	Vero Beach, Winter Garden
Jackson		20	Marianna
Jefferson		200	Monticello
Lee	12		Ft. Myers
Leon		50	Tallahassee
Levy	64		Chiefland, Otter Creek
Madison	62		Madison
Manatee	18	20	Bradenton
Marion		75	Ocala
Martin		25	Stuart
Monroe	69		Key West
Okeechobee		35	Okeechobee City
Orange		135	Orlando, Winter Park
Palm Beach		224	Lake Worth, Pahokee, West Palm Beach
Pasco		43	Dade City
Pinellas		115	Clearwater, St. Petersburg
Polk	198	35	Bartow, Lake Wales, Winter Haven
St. Johns		30	St. Augustine
St. Lucie		55	Ft. Pierce
Sarasota	14	25	Sarasota
Suwannee	57	50	Live Oak
Volusia		76	Daytona Beach, DeLand

DISTRIBUTION

Formal enrollments	986
Informal enrollments	3,397
54 class centers in 35 counties	4,383

TABLE III.—SHORT COURSES AND SPECIAL SUBJECTS

	Enrollment
Short Courses:	
1942-43	
Conference on Coordination of War-Time Law Enforcement Activities	310
Institute on Tuberculosis	50
Water and Sewage Treatment	188
1943-44	
Institute on Tuberculosis	56
Water and Sewage Treatment	156
Civilian Defense Leadership:	
Organization and Administration	447
Chemical Warfare Agents and First Aid	1,651
Control Centers	996

Miscellaneous:	
Sanitation Personnel Training	44
Automobile Insurance	106
Waterworks Operators	10
Plantings for Florida Homes	27
Interior Decoration	144
Engineering, Science, and Management War Training	167
TOTAL ENROLLMENT	4,352

TABLE IV.—SUMMARY OF INSTRUCTION

Enrollments

Correspondence Study		
College	4,943	
High School	1,110	
Non-Credit	103	
Professional Reading	374	6,530
Extension Classes		
Formal	986	
Informal	3,397	4,383
Short Courses and Special Subjects		
Short Courses	760	
Civilian Defense Leadership	3,094	
Miscellaneous	498	4,352
TOTAL		15,265

TABLE V.—SERVICE FUNCTIONS

Circulation Report of Loan Materials

	No. Counties Served	Circulation
Extension Library Service		
Reference Books	67	9,036 books
Unit Libraries	38	11,756 books
Package Libraries	55	10,520 articles
Dramatic Publications	55	2,472 plays
Audio-Visual Aids		
Films (22,627 showings)	58	9,631 film loans
Slides (1,281 showings)	22	427 set loans
Filmslides (615 showings)	10	143 roll loans
Prints	24	2,902 pictures
Recordings	33	1,536 records

Respectfully submitted,

B. C. Riley, *Dean*

REPORT OF THE ACTING UNIVERSITY LIBRARIAN

To the President of the University:

Sir: I beg to submit the following report on the progress made in the University Library for the biennium ending June 30, 1944.

Our personnel varied rapidly and greatly. We had at the end of the year 12 professional workers, 22 full-time assistants and 23 student assistants. There was not one person on the staff holding the same position she held at the beginning of the biennium. In spite of many changes, good work was done in all departments. Our regular budget remained about the same, but the generosity

of the General Education Board added $40,000, most of which was spent for books, allowing purchase of such valuable items as the American Culture Series, the Hakluyt Society publications, and Johnson's *Dictionary of the English Language*, 1755.

The portion of the General Education Board grant not spent for books was used to make a long needed Central Catalog. One of the regular catalogers started work on it in September, and incorporated it into the University Library Catalog. It contained an author, or main entry, card for every title in the departmental libraries on the campus. These entries were all made according to professional cataloging standards, and the cards were stamped to indicate the location of the books. The Libraries, with the number of cards for each, included: Law, 1,421; General Extension, 9,840; P. K. Yonge, 5,021; Fulk Administrators, 660; Agricultural Experiment Station, 16,803; Curriculum, 14,600; School of Forestry, 6,552—making a total of 54,897 entries. The cards in the Florida Union, Architecture, and Chemistry-Pharmacy Libraries were previously included. We hope that the Catalog will prove to be a great help to the faculty and the students.

The University became the Florida depository for Library of Congress cards. We received 158,601, all of them filed in three cabinets following our University Catalog. Eighty-two of the proposed 160 volumes of the Library of Congress Catalog of Printed Cards have been received. These volumes precede the depository cards.

The Florida Union Library author and title catalog was corrected and the books were revised every two weeks by one of our staff members. The catalog of the Chemistry-Pharmacy Library was completed, and the usefulness of the Library was greatly increased by the addition of important journals, texts, and treatises in the various fields of chemistry and pharmacy.

One new full-time position was created—that of Documents Librarian. This department now has 6,812 items in Federal, 992 in State, and 242 in foreign documents. The number is being increased by gift, exchange, depository, and purchase as rapidly as possible.

The Reference Department functioned with one trained member and some student assistance. Thirteen hundred and fifteen volumes were added. The Shaw List was rechecked and as many items as were available were ordered. Aisle shelves relieved some of the congestion, as did a new filing cabinet for pamphlet material. Current material in the collection on war information—now mostly on postwar planning—was displayed on a table set aside for the purpose. The Florida Collection gained 968 items. A new cabinet was added here, too. The Reference Librarian answered 111 reference questions by mail, made requests for 436 items of free material, and requested 133 loans from other libraries.

Our shelving space became so crowded that the Circulation Department undertook to move some of the less frequently called for books to the fourth and fifth floors of the Law Building. A faculty committee assisted in the selection and 27,000 volumes were transferred. This cleared 904 shelves and the entire collection was then shifted to make room for the books that had been stacked on the floor and for the new books made ready. During the biennium, the circulation of books totaled 140,622, distributed as follows: faculty members, 10,192; students and others, 38,676; reading rooms, 25,936; carrells, 325; Reserve Room, 37,093; and General College Reading Room, 28,400. Since the number of student

assistants available grew smaller and NYA aid stopped, several Gainesville girls were employed, temporarily, to fill in. The positions of Student Supervisors were discontinued. Time cards and payroll make-up were moved to the Librarian's Office. Perpetual inventory was taken to keep up with the books and assure their proper location. Posters and displays were changed frequently. A new section was set aside for books on liberal education for faculty use. Army and Air Corps Cadets were encouraged to use the University Library and checked out 1,759 books from January through June, 1944. Study halls with instructor supervision for trainees were held in the General College Room.

The Periodicals, Binding, and Exchange Department operated with two on its professional staff, although one of these gave about half-time to supervising the General College Room. There were 752 periodicals received on subscription, 326 as gifts, and 312 on exchange, making a total of 1,390. Forty-four new subscriptions were added. Serial runs were purchased for a number of important periodicals, such as the *Archives of Neurology and Psychiatry*, the *Modern Language Review*, and the *Journal of the National Institute of Social Sciences*, to name only a few. Every effort was made to fill in gaps in periodicals either by purchase or exchange. Sixty-seven Florida periodicals and 58 Florida and 20 out-of-state newspapers were received. There were 4,597 volumes bound and 140 new titles added to the binding list. Four duplicate exchange lists were sent out, resulting in 90 bound and 3,817 unbound pieces sent out, and 322 bound and 3,979 unbound pieces received. The Exchange Division sent out 808 copies of the Short Title Checklist of Official Florida Publications which was prepared by the Reference Department. The Checking Edition of the first supplement to the Union List of Serials was checked for our holdings.

The purchase of so many more books added greatly to the work of the Order Department. When the load was greatest, some extra help was provided and the books were handled expeditiously and well. When the peak passed, the Department carried on with two people.

The weight of the increased buying power fell heaviest on the Catalog Department which was already far behind in its work. By streamlining the work wherever possible and cutting out all processes not absolutely essential, it kept up with all new purchases and took up over half of the slack. In this biennium 26,519 volumes were acquired for the University Library, 1,350 for P. K. Yonge, and 1,054 for General Extension, a total of 28,923. The number cataloged was 30,990 volumes and 17,517 titles, which included P. K. Yonge and General Extension Division books and 404 reels of microfilm. Cards added numbered 105,195, of which 6,008 were for P. K. Yonge and 2,198 for General Extension. The Catalog grew from four sections to ten. This included three cabinets for the Library of Congress cards.

A number of fine gifts, comprising some 2,500 volumes, were received from over 300 donors. The Friends of the Library issued five attractive bulletins which undoubtedly resulted in some of the gifts.

The University Library at the end of the biennium had 165,692 volumes plus 6,819 for P. K. Yonge and 14,724 for General Extension, all fully cataloged. The Central Catalog added 40,036 cards which represented 58,883 volumes for Law, Fulk Administrators, Agricultural Experiment Station, Curriculum and Forestry Libraries that had not been included. This made a total of 246,118 volumes in all of the Libraries. This compared quite favorably with the figures given in the report for the biennium ending June 30, 1938, which showed

101,225 volumes in the University Library and 140,884 volumes in all the Libraries. According to statistics of Southern Colleges and Universities in 1942-43, we ranked in sixth place with respect to the number of volumes added during the year. More recent statistics would probably give us an even more favorable standing.

The Library Committee was enlarged to include members of the various Libraries as well as representatives from schools and departments in the University. It is an interested, active group, responsible in a large measure for library development on the campus.

Respectfully submitted,

NELLE BARMORE, *Acting Librarian*

REPORT OF THE PROFESSOR OF MILITARY SCIENCE AND TACTICS

To the President of the University:

SIR: I submit herewith the following report on the activities of the Department of Military Science and Tactics for the biennium ending June 30, 1944.

The courses of instruction have been carried out in accordance with the War Department program of training. There have been several important changes in the methods of operating the Military Department since the last report of 1942. Beginning with the summer of 1942, the War Department discontinued indefinitely the practice of operating summer camps for the Reserve Officers Training Corps. Because of this change in training, it was no longer possible for ROTC commissions to be issued by the University at the time of graduation.

Our fourth year advanced ROTC students were called for active duty in the summer of 1943 and were commissioned after the successful completion of the Officer Candidate course. During the same summer, this Department took over the Army Specialized Training Program in addition to ROTC activities.

The War Department did not offer any advanced contracts for our ROTC students for the year 1943-44, due to the fact that all eligible ROTC students were in the armed services. Later in 1943 the War Department returned third-year ROTC students to the University of Florida in uniform to continue academic work and complete ROTC instruction. In the spring of 1944 these juniors were taken from the University and sent to Officer Candidate Schools, where the majority of them have received commissions.

We have had many changes in personnel and in the details of instruction. We no longer have branch instruction. We have disposed of all Field Artillery material and at present we are giving basic instruction which is essential for all arms. We have disposed of the wooden training rifles and have on hand a supply of the rifles previously used.

In spite of the various difficulties and changes in conditions, we have maintained the highest rating of efficiency, as shown by our Annual Inspection.

Respectfully submitted,

RALPH L. JOYNER, *Lt. Colonel, Field Artillery,*
P.M.S.&T.

REPORT OF THE ACTING DIRECTOR OF THE INSTITUTE OF INTER-AMERICAN AFFAIRS

To the President of the University:

SIR: I beg to submit the following report on the activities of the Inter-American Institute for the biennium ending June 30, 1944.

During the period covered by this report the Institute was concerned chiefly, but not exclusively, with Latin-American students brought to the University under its auspices. In 1942-43 there were twenty-five students representing ten Latin-American countries (including Puerto Rico) in residence at the University. The following year there were on the campus thirty-two students, representing twelve Latin-American countries.

Degrees were conferred in 1943 upon five Latin-American students, and in 1944 the same number. Six were awarded the master's degree, and four the bachelor's degree. On the basis of enrollment, this is considered a creditable performance.

With respect to curricula, a course in English was established with the help of the Coordinator of Inter-American Affairs in the summer of 1943. Eight scholarships were awarded and the salaries of two instructors were paid. The course was not renewed for lack of funds.

In February, 1944, a graduate course was set up for the first time in sanitary engineering. Five Latin-American graduate students are now registered for the course. The Institute also cooperated in bringing to Florida in the summer of 1944 a Brazilian trainee of the Extension Service of the United States Department of Agriculture. This student is now acquainting himself with practical phases of the agricultural industries of the State. Finally, plans are being formulated to open the School of Forestry in 1945 to a group of Latin-American students, if official assistance can be obtained for the project.

Other activities of the Institute during the biennium included a lecture tour of the universities and colleges of the State, arranged in 1943 by the Institute for a Chilean and a Paraguayan lecturer, and lectures by the Acting Director to the freshmen class of the University, to various high schools, and to civic groups, including the Rotarians, the Kiwanians, and the Junior Chamber of Commerce. The Acting Director is also serving his second year as a chairman of the Inter-American Division of the State Defense Council and Chairman of the Inter-American Division of the State Chamber of Commerce. Radio broadcasts have been made and motion pictures have been shown from time to time on the countries of Latin America.

Among the general recommendations for improvement which seem appropriate, I advocate the transfer of the offices of the Institute to a cooler floor, the continuation of the scholarship aids, and the introduction of a special comprehensive course in English for Latin Americans, which will serve as a substitute for C-3, and which will comprise the following features: (a) reading of simplified English texts; (b) study of basic English grammar, presented partly in Spanish; and (c) practice in comprehension and conversation with the aid of mechanical appliances furnished and operated by the Speech Department. I also recommend that a year's credit be allowed those Latin-American students who show a knowledge of Spanish and Portuguese comparable to the knowledge of English required for C-3, and that a Spanish House be organized to afford

teachers on opportunity to learn conversational Spanish, and later Portuguese, during the Summer Sessions of the University.

Respectfully submitted,

JOHN F. MARTIN, *Acting Director*

REPORT OF THE DIRECTOR OF THE FLORIDA STATE MUSEUM

To the President of the University:

SIR: In submitting my report for the biennium ending June 30, 1944, I wish to say that the period represented has not been a very propitious one. However, we are not totally discouraged over the results attained.

In my last biennial report I mentioned the need for the extension of the Hall of Ornithology on the second floor. I am now glad to report that fifteen more habitat group cases for this extension are now more than half completed, and that all the cases are set up and are awaiting completion. Considerable headway has been made in the preparatory in restoring a large number of specimens of a perishable nature, and in preparing them for exhibition.

For the biennium our records show 90 accessions of 32,261 specimens, valued at $55,590.20. To date, we have a total of 3,667 accessions and 339,295 specimens, which are valued at $469,822.79.

The visitors' register indicates that our attendance for the biennium was 48,739 persons, making a total of 140,303 registrants since we have occupied the present location.

What few recommendations I have will appear in the budget.

Respectfully submitted,

T. VAN HYNING, *Director*

REPORT OF THE ACTING DIRECTOR OF THE FLORIDA UNION

To the President of the University:

SIR: I respectfully submit the following report for the Florida Union, student activity center of the University of Florida, for the biennium July 1, 1942 to June 30, 1944.

Director D. R. Mathews is on leave of absence to serve in the Army and the acting directorship was filled by Mr. J. E. Johnson who died during the past winter.

One of our primary objectives has been to keep this building a wholesome, clean, attractive, and useful place, maintaining, as far as possible, the same atmosphere that has always prevailed under normal conditions. In spite of the decreased civilian enrollment in the University, there has been little or no reduction in the usual routine of student services in the building, with the exception of a cessation of many club meetings and the discontinuance of other student offices such as those of the *Orange Peel* and *Seminole* publications. With decreased enrollment there has come inevitably a severe cut in student fees to

the Union and business-as-usual conduct of the building has been increasingly difficulty. However, our economy measures have been designed to reduce our hours of operation and the duplication of personnel rather than to curtail the quality of our service.

There have been several changes and improvements in our static facilities. A prayer and meditation room has been set aside, two club rooms have been converted into a soldiers' lounge and a social lounge, and Air Corps offices have been housed. A new automatic movie screen was installed in the auditorium and a concrete floor laid in the projection room. A number of pieces in the lounge were re-upholstered and several valuable and irreplaceable articles have been temporarily stored to protect them from hard usage during this transitional period.

As a special service to the students and the University in general, we have operated for the past half-year a Western Union sub-station which to date has sent over 1,500 messages and delivered some 4,000. We have also sponsored the organization of University women employees into a club known as the Florida Campus Club for the purpose of giving them greater identification with University social and official functions.

For the service men in particular the Union has endeavored to offer programs and courtesies to promote good will and to assist the University in its effort to treat these men as an integral part of University life. Receptions were given in honor of incoming units; a Chaplain's Hour was offered each day; a soldier sewing service was conducted during which time, with the cooperation of the University Women's Club and the American Red Cross, almost 2,000 garments were repaired by nearly 100 workers; Army classes and movies were held; special dances and other functions, including a homespun Christmas Day party, were a part of our usual routine.

Camp Wauburg, a recreational lake resort sponsored by the Florida Union, has served many student organizations and has been used by military units for both social and instructional purposes. In addition to this, thousands of individual University students and faculty members have made use of the camp facilities.

With the completion of the new wing, upon which construction has been temporarily halted, and with the increase in the student fee from $1.00 to $2.00 per semester for the regular session and from 50 cents to $1.00 per summer session—a change which has already become effective—the Florida Union should be able to give increasingly more complete and valuable services to the students of the University and, consequently, to the University as a whole.

Respectfully submitted,

LESTER L. HALE, *Acting Director*

REPORT OF THE ACTING DIRECTOR OF THE DIVISION OF ATHLETICS AND PHYSICAL EDUCATION

To the President of the University:

SIR: I have the honor to submit to you the report for the Division of Athletics and Physical Education for the biennium ending June 30, 1944.

THE PROGRAM OF THE DIVISION

The program of intercollegiate athletics for the biennium consisted of the 1942 football schedule and the 1942-1943 basketball schedule. The football team competed in ten games, winning three and losing seven. The basketball team competed in sixteen games, winning nine and losing seven. By the end of the basketball schedule it became evident that in the war emergency there would be few qualified candidates for athletic teams and that an attempt to maintain a program of intercollegiate athletics might not be consistent with the best interests of the country. Accordingly participation in intercollegiate athletics was discontinued. The University continued its membership in the Southeastern Conference, however, and has participated in the business sessions of the Conference. Following the annual meeting of the Southeastern Conference in December, 1943, it appeared that conditions within the Conference and throughout the nation were such that it would be advisable for the University of Florida to resume intercollegiate athletics in the autumn of 1944. Favorable action was taken and plans were formulated to this end.

A program of training for physical fitness for all male students physically able to participate was established with the opening of the 1942 Summer Session. When detachments of the Army Air Corps and the Army Specialized Training Program were located at the University, the athletic staff assumed the additional responsibility for the physical training program for the personnel of these detachments.

The program of intramural athletics was continued in spite of the heavy loads which were assumed by the athletic staff in connection with the aforementioned activities. It is significant that the intramural program has functioned very successfully in spite of wartime conditions. The record shows that 3,288 players participated in intramural sports in the period 1942-44. An additional significant item that should be recorded is contained in Head Coach Lieb's statement: "I believe I can safely say that 1,000 men have been taught to swim in the past two years."

IMPORTANT PROBLEMS AND PROJECTS

It is noteworthy that with five members of the athletic staff in military service and with only two replacements, the entire program of activities as described above has been carried on with a high degree of proficiency and success. The coaching staff has been active in promoting good will and cooperation among the high schools of the State and every legitimate effort has been made to induce boys graduating from Florida high schools to attend this University.

FACILITIES

There has been a concerted effort to maintain the athletic buildings and grounds in good condition with a minimum of expense. No additions have been made to the plant.

PERSONNEL

There were no important changes in staff during the biennium.

RECOMMENDATIONS

If an adequate program of physical training is to be offered after the war, it will be necessary to have expanded facilities in playing areas and in dressing quarters. The most pressing need, in any event, is a new gymnasium. The

present quarters are very inadequate. Many students come to the University from high schools in which the gymnasiums and the gymnasium facilities are superior to those at the University. When compared with that of other universities, our gymnasium service is a severe handicap in attracting high school boys to attend the University of Florida. The need for a new gymnasium can scarcely be overemphasized.

WAR ACTIVITIES

The war activities of the Division of Athletics, aside from the physical fitness program for civilian students and a class for residents of the community, have been carried on under the supervision of the Director of War Training Courses. The records indicate that the compulsory physical fitness program for civilian students has produced good results. It seems safe to say that this program has been a direct and effective contribution to the war effort.

Respectfully submitted,

PERCY BEARD, *Acting Director*

REPORT OF THE ACTING DIRECTOR OF PUBLICITY

To the President of the University:

SIR: The Department of Publicity, which includes for budgetary purposes the office of the Chief Clerk in Charge of Alumni Affairs, has operated during the past biennium under rather serious handicaps, particularly with respect to a personnel turnover involving the Chief Clerk and the employees under her jurisdiction. Despite these handicaps, the work in connection with military service aspects of alumni affairs has been kept up-to-date and in excellent condition.

The Department has continued to place special emphasis upon the interpretation of the University's objectives, functions, and activities. Some indication of its news coverage may be gained from the fact that during the past six months of the current calendar year, it has issued 75 mail releases of general news, 100 Associated Press news dispatches, 71 Associated Press sports releases, and 22 sports mail releases, totaling approximately 40,000 words.

In the period under review, the Alumni Office and the publicity staff have cooperated in establishing and maintaining on a monthly basis *The University News of the Fighting Gators.* This publication, which has reached 4,500 alumni in the armed services through their home folks, has brought inestimable good will to the University. Notes of appreciation from both service men and their families number into the hundreds.

More than 8,000 former students were in service on June 1, 1944. Of the alumni among these students, nearly 80 per cent were officers, some having received their commissions through the ROTC at the University, others having earned commissions after their entrance into the armed forces. Available records indicate that 133 alumni have given their lives, 56 have been reported missing, 15 have been taken prisoners, and an indeterminate number have been wounded in action.

Since the beginning of the war, Florida men have been frequently decorated. Through June 1 of this year, 157 alumni had won 376 decorations, ranging from

the Purple Heart to the Distinguished Service Cross. On the same date there were seven aces among the alumni. The University may be justly proud of the records that Florida men are making on all the fighting fronts and in all branches of the armed services.

Respectfully submitted,

W. L. Lowry, *Acting Director*

REPORT OF THE DIRECTOR OF RADIO STATION WRUF

To the President of the University:

Sir: In making this biennial report, I desire to outline briefly a few of the outstanding accomplishments of the Station and to enumerate its needs for the immediate future.

In furthering the war effort, WRUF has given to the Federal Government, each year since December 7, 1941, over $100,000 worth of time, evaluated in terms of our card rates.

We have carried on our sustaining educational program even though the Station has suffered financially from its policy of allotting the most desirable time for advertisers to University and public service programs. This has inevitably cut down the revenue of the Station, but we have increased our value as far as public service is concerned.

The Station has outgrown its original and limited facilities. The increase in time, in personnel, in commercials, and in all of our activities presents a need for many changes. Additional office facilities and studios, as well as the necessary improvements appertaining to them, should be provided for at once. Our limited facilities hinder greatly the work we are endeavoring to do. New additions to the building should be made as soon as war conditions warrant them. The Federal Communications Commission is very desirous that we move the transmitter to another location in order to give the people in Gainesville and its suburbs better radio reception.

Our technical equipment needs modernizing and we are confronted with the rapid advances being made in the field of radio, such as Frequency Modulation, Television, and Facsimile. A thorough study has been made by the staff of WRUF and, if the University of Florida is to maintain its place in the rapidly growing science of radio, we recommend that new applications be made before the Federal Communications Commission and that FM equipment be purchased immediately. Television, due to its cost, is not practical for us at present, but, in my opinion, it is a matter of only two or three years until it will have a very definite place in the field of radio. It is further recommended that in view of the rapid growth of radio—FM, Television, and Facsimile—definite plans for installation of these new and modern improvements be adopted.

Radio Station WRUF has been cited nationally several times during the past two years for outstanding service in various fields, including fire prevention, war effort drives, and work in behalf of the Army, Navy, and Marine Corps.

Radio today probably influences more people than any other medium we have, in that it reaches virtually everyone, the illiterate as well as the literate. This fact alone carries a tremendous demand for college-trained men in the field of

radio. WRUF recognized this need as early as 1931 and has furnished many outstanding men to the radio field.

In closing, let me reiterate the great need for increased facilities and modernized equipment, which should be secured just as soon as material is made available after the present emergency is over.

Respectfully submitted,

GARLAND POWELL, *Director*

REPORT OF THE UNIVERSITY PHYSICIAN

To the President of the University:

SIR: This Department has operated with considerable difficulty during the past biennium. The Army called both of our resident physicians, and during the past two years we have operated with a part-time resident physician and the assistance of one Army physician detailed here for duty with the Air Corps group. The nursing staff has not been affected to a great extent and we have been able to obtain suitable help up to the present time.

The sick rate of the Army group was exceptionally high when compared to that of the student group and the work of the Department during the biennium was approximately the same as for the previous biennium, in spite of the decreased number of students attending the University.

The equipment of the Infirmary has undergone considerable deterioration during this time with ordinary wear and tear and no effort has been made to replace equipment during the war.

The Health Service has maintained its usual high standards in spite of the reduction in personnel and, in addition to caring for the sick, we have maintained constant supervision and physical examination of all food handlers employed at the University Cafeteria, the P. K. Yonge Cafeteria, the Soda Fountain, and the Dairy. The general sanitation of the campus has been under constant supervision by this Department.

During the biennium there have been no epidemics of any consequence and no student deaths.

Respectfully submitted,

GEORGE C. TILLMAN, *University Physician*

REPORT OF THE DIRECTOR OF THE WAR TRAINING COURSES

To the President of the University:

SIR: As Director of War Training Courses I take pleasure in submitting to you the following report on the conduct of the war training courses carried on at the University of Florida during the biennium ending June 30, 1944. Though the University has served the Government in many ways throughout the emergency, this report is confined to the programs of the Army Air Forces and Army Specialized Training groups, the administration of which was the responsibility of the Director.

ARMY AIR FORCES PROGRAM

At the end of February, 1943, the 62nd College Air Forces Training Detachment (Air Crew) was activated at the University of Florida with a quota of 750 trainees. Of this quota, 743 trainees were actually enrolled when instruction started. Beginning with the following May and continuing with reasonable regularity with the graduation and replacement of approximately 150 trainees monthly until the close of the CTD Program in June, 1944, the University served in the training of 2,994 members of the Air Crew.

The purpose of the program, which was planned for a twenty-week period of instruction, was to prepare academic students, mentally and physically, for intensive ground training in flying schools. The men selected for this training were members of the Air Corps of the United States Army who had been classified for Air Crew training through mental and physical screening tests. They were given three types of training: academic, physical, and military. The first prepared them for flight and ground school instruction in the Air Forces Flying Schools; the second equipped them to absorb future intensive training without undue fatigue or ill effects; the third provided them with instruction in basic military indoctrination, military customs and regulations, and infantry drill.

The University was responsible for the housing and messing of the trainees, for the academic instruction, and for the physical training required by the program, while officers and men of the Air Corps were assigned to the detachment to give overall supervision to the program and were delegated specific responsibility for the military training. The academic program consisted of mathematics, physics, history, geography, English, civil air regulations, and medical aid. In addition to work in class and laboratory, supervised study was required in each of the major subjects of the program.

The physical training program, although under the general direction of the University authorities, was more nearly autonomous than any of the other areas of instruction, since the Army, through its own supervisors, attempted to secure a greater uniformity of practice in that division of the trainees' program. Florida's climate added greatly to the success of the physical training program by permitting almost continuous outdoor activity. The excellent health and physical vigor of the trainees and the lack of infectious diseases among them were noticeably evident during their stay here.

Under the direction of the officers of the Air Corps who were assigned to the detachment, the trainees were given military instruction, including ten hours of flight instruction. All matters of discipline were likewise the responsibility of the military officers in charge.

ARMY SPECIALIZED TRAINING PROGRAMS

In May, 1943, there was activated at the University a unit of the Army Specialized Training Program, officially known as Service Command Unit No. 3418, ASTP. It became the responsibility of the University to house and mess approximately 600 trainees and to provide instructional facilities (plant and staff) for them. The program, which operated on terms, or cycles, of twelve weeks, was designed to cover both the Basic Phase Curriculum and the Advanced Phase Curricula in Engineering. The University received an original allotment of 494 trainees in these curricula. In the following October, 108 former advanced

ROTC students of the University were returned to the campus by the Government to pursue their studies and military training until openings occurred in Officer Candidate Schools. These trainees continued in the University until late spring, 1944, many of them being able to complete their work for a degree. With the cycle beginning in December, 1943, the University received an allotment of students under the Army Specialized Training Reserve Program, and since then has continuously handled a contingent of these seventeen-year-old students. These students have pursued a curriculum comparable in nature and scope to the Basic Phase Curriculum of the ASTP and have been given such military training as will make them better soldiers when, upon reaching selective service age, they are inducted into the service of the United States Army. In March, 1944, fifty trainees in the Preprofessional Curriculum were assigned to the University. These men, carefully screened and selected, were premedical and predental students pursuing a prescribed accelerated program leading to matriculation in medical or dental schools. In all these accelerated programs, as well as in that of the AAF, the academic load was on an average twenty-four hours a week in contrast to the normal civilian academic load of sixteen hours. During the year ending June 30, 1944, the University had enrolled 1,499 ASTP trainees and ASTRP students. Combining enrollments in all its war training groups—AAF, ASTP, ASTP-ROTC, and ASTRP—the University began with 743 men in February, 1943, reached a peak of 1,517 in the following December, and diminished to a total of 225 by June 30, 1944.

The ASTP had as its objective the technical preparation of personnel needed by the several services of the United States Army. At the University the trainees in the Basic Phase Curriculum were prepared for the advanced phase engineering curricula; the trainees in the Advanced Phase Curricula were prepared for technical services in the Army Ground Forces, Army Services, or the Army Air Forces. In the early stages of the program, there were Advanced Phase Engineering trainees in chemical engineering, civil engineering, electrical engineering, and mechanical engineering. The Curriculum of the Basic Phase consisted of chemistry, mathematics, physics, English, history, geography, and engineering drawing. In the Advanced Phase Engineering Curricula and in the Preprofessional Curriculum, the courses of instruction varied with the areas, but for the most part were those usually required by professional schools of engineering, medicine, and dentistry. As with the Army Air Forces, the University assumed responsibility only for instruction in the academic work and for physical training, while the University Commandant and his staff had charge of the military training and discipline.

GENERAL ADMINISTRATIVE FEATURES

Prior to the activation of the war training courses on the campus, the President of the University appointed a Director of War Training Courses and a committee, of which the Director was chairman, charged with the responsibility of policy formation relating to the academic phases of the programs. The Director, who was assisted in carrying out the academic programs by University staff members appointed as chairmen of the courses and by administrative officers of the University, was responsible directly to the President for the conduct of the courses. Moreover, he acted as liaison officer between the University and the military staff on all matters relating to the University's responsibility for instruction. In May, 1944, the present Director was appointed to succeed

the former Director, who resigned to accept the deanship of the College of Education of The University of Georgia. Despite the ever-arising changes and complications in the programs and the consequent adjustments by the staff and the administration, there has been throughout a maximum of cooperation and a minimum of friction.

Whenever possible, the academic and physical training programs of both the AAF and the ASTP were staffed by regular members of the faculty, who were generally asked to continue teaching in their field of major interest. Some were assigned to other fields where the need was greater and where their background gave promise of effective instruction. In some areas, notably physics and mathematics, it was necessary to bring to the campus persons of nonpermanent University status. Approximately 135 different members of the University staff served in an instructional capacity in the University's war training programs. More than sixty-five of these were asked to serve in fields other than their major interest. In addition, thirty-eight instructors were added to the staff on a temporary basis to assist with instruction in these programs.

Every instructional aid and facility of the University was made easily accessible to the men in the war training programs. The University Library was made available both for supervised study in the AAF program and for general use by all trainees. Academic schedules were arranged by the Registrar's Office and a complete and accurate file of each trainee's achievement is a matter of permanent record. Through the use of the facilities of the University Board of Examiners it was possible to give better and more frequent comprehensive tests and examinations than would otherwise have been possible. The University in general exhibited the same concern for the academic welfare of the trainees as for its civilian students in normal times.

The University endeavored to provide a complete service for all enrollees in the war training programs. All of the men were housed in the University's Residence Halls, and mess was provided in the University cafeterias. Orientation sessions were held with each incoming group and personnel data were obtained. The Florida Union was placed at the disposal of the enlistees. Special entertainment programs were arranged, a service men's lounge was provided, and a sewing service established—all for the comfort and welfare of the trainees. The equipment of the University Speech Clinic was available throughout the programs, and any trainee with speech defects could schedule a period for help in correcting his handicaps. In short, the University exerted every effort to make them feel that they were "Florida men."

I feel that the presence of the trainees has been highly advantageous to the University and that, through the use of its facilities, the University has made a notable contribution to the Government in the training of nearly 4,500 men for the armed forces.

Respectfully submitted,

J. Hooper Wise, *Director*

The University Record

of the

University of Florida

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BIENNIAL REPORT OF THE PRESIDENT TO THE BOARD OF CONTROL

For Biennium Ending June 30, 1944

Vol. XL No. 1 January 1, 1945

Published monthly by the University of Florida, Gainesville, Florida

Entered in the post office in Gainesville, Florida, as second-class matter, under Act of Congress, August 24, 1912

Office of Publication, Gainesville, Florida

REPORT OF THE PRESIDENT OF THE UNIVERSITY

To the Honorable Board of Control of
State Institutions of Higher Learning of Florida.

GENTLEMEN:

My last biennial report covered the period embracing the beginning of the war and certain adjustments that were made necessary at the University because of that fact. During the biennium closing June 30, 1944, the complete facilities of the University were involved in the war effort. At the same time, the entire program of service to civilians was kept intact. The details of all activities are set forth in the reports of Deans, Directors, and other administrative officers. I shall confine myself to the principal features and some of the high lights of the period, attempting in short compass to summarize this critical two-year interval. The period was one of constant readjustment and intense activity, and the University carried on, under most difficult conditions, with more success and less impairment of its normal functions than could have been anticipated.

In the early stages of the war, the enrollment did not fall so rapidly as might have been expected. In the academic year 1941-42, which marked the opening of hostilities, 3,239 students were enrolled in the regular session and 3,202 in the summer terms. During the biennium under consideration the enrollment began to drop, and this tendency was greatly accelerated by the amendment of the Selective Service Act which reduced the induction age to eighteen years. Deferments were granted to a limited number of students who were preparing for certain critical occupations in the fields of engineering, physics, chemistry, and other technical areas essential to the best conduct of the war. Aside from these deferred students, available material for civilian programs at the University of Florida was confined to boys with physical disabilities, others under eighteen years of age, and a few women. By the end of the biennial period there were fewer than a thousand civilian students on the college level in the University. To these were added about five hundred students in the P. K. Yonge Laboratory School.

During the biennium the policy of the administration has been to hold together the staff of the University as effectively as possible while making the maximum contribution to the war effort, and preserving intact all of the services demanded for civilians. The reduced enrollment and the demand for trained personnel by the armed forces made it possible to grant many members of the staff leaves of absence for service in the armed forces or in war production activities. A high degree of flexibility has been maintained and, apart from the loss of some members of the staff who left the University for more remunerative positions, the integrity of the institution has been preserved.

A principal factor in carrying out the above policy has been the ability to use our facilities in large measure for assisting in the winning of the war. In my last report I described a Chemical Warfare School, the Civilian Pilot Training Program carried on in cooperation with the Civil Aeronautics Administration, and other war efforts. Our war activities have been greatly expanded during the biennium under discussion. Three extensive training services, including an Officer Candidate School, an Army Air Forces Air Crew Training Program, and the Army Specialized Training Program for engineers and technical personnel, have been operated by contract with the War Department.

The Extension Services, both General and Agricultural, have carried on enlarged programs, and wartime research has been stepped up tremendously both in engineering and in agriculture. Some of this research is confidential and may not be revealed until the war is over.

TRAINING PROGRAMS

On September 28, 1942, an Officer Candidate School was activated at the University of Florida for the purpose of training officers who would serve the Army in an administrative capacity. There were about six of these schools in the country, the third of which was established at the University of Florida. Over 1300 officers were instructed at and graduated from this School, nearly all of whom are now actively serving in the Army. The School was operated directly in cooperation with the Adjutant General's Office, War Department, and received high commendation from the War Department.

Following negotiations with the Army Air Forces, in February, 1943, there was activated at the University a program for the training of air cadets with a quota of 750 trainees. Beginning with the following May, and continuing with reasonable regularity with the graduation and replacement of approximately 150 trainees monthly until the close of the program in June, 1944, the University served in the training of 2,994 members of the Air Forces. The University was responsible for the academic instruction and physical training demanded in the program, while officers and men of the Air Corps were assigned to the detachment to provide over-all supervision for the program and specific responsibility for the military training. The academic program consisted of mathematics, physics, history, geography, English, civil air regulations, and medical aid. Each trainee also had ten hours of flight instruction.

In June, 1943, there was activated a unit of the Army Specialized Training Program, having as its objective the preparation of technicians needed for the several services of the United States Army. The program at the University, to which 494 trainees were originally allotted, was designed to cover the Basic Phase Curriculum and the Advanced Phase Curricula in Engineering. These were followed by a group of approximately 100 former advanced ROTC students of the University, whom the military authorities returned to pursue their studies and training until openings in Officer Candidate Schools occurred, by nearly fifty trainees in the Preprofessional Curriculum leading to medicine and dentistry, and by allotments of reservists. In all, up to July 1, 1944, the University had enrolled nearly 1,500 men in these various phases of the Army Specialized Training Program. In the Basic Phase Curriculum, the trainees studied chemistry, mathematics, physics, English, history, geography, and engineering drawing; in the Advanced Phase, the trainees pursued those studies usually required by professional schools of engineering, medicine, and dentistry. As with the Army Air Forces, the University assumed responsibility for instruction in the academic subjects and for physical training, while the Commandant and his staff had charge of the military training and discipline.

Mr. Kenneth R. Williams, who was appointed Director of War Training Programs, resigned in May, 1944, and was succeeded by Dr. J. Hooper Wise. The President of the University served as a member of an Advisory Committee consisting of ten college presidents who were asked to cooperate with the War Department in planning and developing the Army Specialized Training Program.

Although contracts with the Federal Government did not permit profits to be made by the institutions having war training programs, a considerable saving was effected through the absorption by the Government of costs for operation, equipment, instruction, and other necessary functions which otherwise would have had to be paid from State funds. In the training of Air Cadets and in the Army Specialized Training Program a total of more than a million and a quarter dollars was paid to the University by the Government. Of this amount something over $750,000 was expended on operation, on the Cafeteria, Residence Halls, Infirmary, Florida Union, Book Store, and on other service units. During these programs 1600 men were fed three times a day and all were housed in the University Residence Halls. A sum of $527,238.07 was transmitted to the State Treasury for payment of salaries, use of facilities, and depreciation on buildings and equipment. There was a net saving on the University budget of $205,333.36, of which $135,907.00 was used to balance the budget. A large reduction in anticipated income from student fees was brought about by the drop in enrollment. Details of finances during the biennium are set forth in the report of the Business Manager, but it may be noted in passing that there was a balance of $69,426.36 available to the University from the two programs as of June 30, 1944.

These programs enabled the University to retain the services of most of its faculty and to utilize its plant facilities during the period when it experienced its lowest civilian enrollment. Through the extra funds made available by the programs, an opportunity was provided for paying the staff for overloads carried, and some increases in salary were made possible. Without these increases, there would have been considerably more sacrifice on the part of the staff, and the number of persons leaving the University for more remunerative employment would have been much larger.

There were other training programs, including pre-radar courses, in which some 150 students were trained in 1942-43.

A very effective and important phase of the training given through the extension service of the College of Engineering was the Engineering, Science, and Management War Training Program, in which approximately 3,000 persons were trained during the first year of the biennium and 2,000 during the second year. Seventy-five sections of thirty-three different courses, ranging from elementary physics and mathematics for high school teachers to postgraduate courses in aircraft engineering, were given. The program was operated in eleven cities of the State in order to spread the benefits of this adult education among as many citizens as possible. This work was conducted under the direction of Professor N. C. Ebaugh, Head of the Department of Mechanical Engineering.

GENERAL EXTENSION DIVISION AND AGRICULTURAL EXTENSION SERVICE

Both the General Extension Division and the Agricultural Extension Service have considerably enlarged their activities during the past two years. The General Extension Division has made a notable contribution to national and civilian defense. Approximately 2,000 men in the armed forces have been given correspondence courses through the University of Florida. The University, through this Division, follows the flag to where they are — to England, India, and literally to the ends of the earth. G. I. Joe has been offered 352 courses on the

college and high school level. Numerous other war activities have been carried on by this Division, of which two were conducted in cooperation with the Adjutant General of Florida. The first involved the registration of workers on the job at Camp Blanding for Selective Service, thereby saving 200,000 vitally important work hours; the second, the coordination of the State Defense Council's training program. Schools were conducted for 1,773 instructors to train the Citizens Defense Corps in fire, gas, and other defense subjects required by the Office of Civilian Defense. By January, 1943, the State Defense Council reported a total of 86,641 persons enrolled.

During the present war the Agricultural Extension Service has been confronted with the greatest responsibilities in its history. In times past its activities have been confined purely to education. Because of the gigantic and essential demand for adequate food supplies, the Congress called upon the Extension Service to undertake the administration of a program providing for the recruiting, transportation, and housing of labor to relieve the shortage brought about by the drafting of farm youth into the armed forces. Under agreement with the United States Department of Agriculture, allocations of funds were made by the Federal Government for this important work. Twenty-six labor camps were provided with a combined housing capacity of more than 13,000 workers, and 3,650 laborers were imported into the State. Of these 1,600 were Jamaicans, 1,200 were Bahamians, and 850 were prisoners of war. These workers have been supplied for the harvesting of citrus fruits, strawberries, potatoes, peanuts, sugar cane, and other Florida crops.

The Agricultural Extension Service has also carried on an Emergency War Food and Conservation Program, under which instructional courses have been given in every community and in rural areas of the State to teach modern methods of canning and preservation of foodstuffs. This was particularly helpful to thousands of families who planted Victory gardens.

During the biennium $275,000 was allocated by the United States Department of Agriculture to the Agricultural Extension Service programs, which were conducted with economy as well as efficiency. As a result, substantial balances were returned to the Government at the expiration of bugetary periods.

RESEARCH

More research has been done at the University during this biennium than at any other time in its history. Much of this research is related to the war effort, particularly in the fields of engineering and agriculture. Engineering research in behalf of the war effort has been subsidized by the Federal Government, and for this purpose approximately $112,000 has been received during the biennium. In addition, the 1941 session of the Florida Legislature appropriated $50,000 per annum for strengthening and developing the Engineering and Industrial Experiment Station. Funds from this appropriation were made available by the Budget Commission in the second year of the biennium. Most of the research being done for the Government is of a secret nature. However, rather outstanding results have been achieved, and these will create pride in all friends of the University when the facts are revealed. For the development of industries and the utilization of the State's products, researches are being carried on in the utilization of lime rock, waste products, particularly in the field of wood processing and canning, and minerals. The possibility of establishing a ceramic industry in Florida is being diligently explored.

There are two ways in which the State can enrich itself. It must either exploit the wealth created by others or create wealth for itself. Through the Engineering Industrial and Experiment Station the University has been given a fine opportunity for creative research which will upbuild the economic structure of the State of Florida.

Agricultural research has been applied vigorously in the fields of food production and nutrition since these were of major assistance to the war effort.

Not only in engineering and agriculture have there been increased activities in research but with the reduction of teaching loads, which have long been too heavy at the University, the scientific staff of the institution has been enabled to make larger contributions than have hitherto been possible.

STUDENTS AND FACULTY IN THE ARMED FORCES

Through the Alumni Office, a monthly bulletin, *The Fighting Gators*, has been sent to parents of servicemen for transmittal to them in the field. Included each month are news items giving accounts of the activities of alumni in the armed services and listing those reported wounded, taken prisoners of war, or lost by death. At the end of the biennium, it was estimated that there were some 8,000 alumni in the armed services, and actual reports had been received from more than 4,000 of these. About one-half were graduates. Among the graduates 76% were officers, 12% non-commissioned officers, and 12% privates and seamen. Of the non-graduates, 31% were officers, 35% non-commissioned officers, and 34% privates and seamen. One hundred and seventy-eight have been listed as killed in action, fifty-eight as missing, and thirty as prisoners of war.

It is a source of considerable satisfaction that the percentage of former students of the University of Florida who are serving in the war effort is as large as that of other institutions of higher learning. Furthermore, Floridians in all parts of the World War theatre have displayed unusual valor. In part, this is indicated by the fact that 235 have won some 553 decorations. Among the outstanding aces in the Air Corps are Lt. Don Fisher, '41; Captain Robert C. Miller, '40; Captain John F. Bolt, Jr., '41; Colonel John Alison, '35; Captain Herbert H. Long, '42; Lt. Louis A. Menard, Jr., '40; and Captain Sheldon Brinson, '38.

The contribution of the faculty in the war training, extension, and research programs has already been mentioned. As stated in my last biennial report, the University early adopted as a major policy the principle that positions made vacant by leaves of absence or resignations be filled only as emergency or necessity dictated. At the height of the training programs it was necessary to augment the faculty by recruiting additional members, some from beyond the borders of the State. In this way the staff has been kept flexible and has been adjusted to wartime demands. Annual leaves of absence were granted from the outset of the war emergency to members of the faculty and staff who could be spared for services in the war. Some members of the staff, occupying positions in critical fields, were requested to remain at the University rather than accept war service. One hundred and forty-eight members of the staff were granted leaves. Of this number 107 entered the armed services, including eighty-six from the instructional staff and thirty-one from the administrative and maintenance staff. Five accepted positions related to the war effort, two pursued work towards their doctorate, while twenty-four whose services were not re-

quired at the University were allowed leaves for personal reasons. Practically all of those on military leave have commissions in the various branches of the armed services.

CIVILIAN PROGRAM

As previously mentioned, during the biennium there was a decrease in the enrollment of civilian students which was rapidly accelerated by the induction of able-bodied boys down to the age of eighteen years. However, the Army trainees, together with the civilian students, substantially increased the enrollment until, during the second year of the biennium, there was a total enrollment of 4,717 students, the greatest number of any year in the history of the institution.

All colleges and departments of the University were kept open and no educational opportunity was denied civilian students. Student activities continued on an abbreviated scale for the most part. Student government, the Honor System, most of the fraternities, intramural athletics, and the usual activities were continued. Intercollegiate sports were discontinued in the year 1943-44. Some of the fraternities became dormant and their social activities were reduced to a minimum. During a part of the period under survey the University leased some of the fraternity houses and made them a part of the Residence Hall system for the use of civilian students. This adjustment was necessary because the Army trainees occupied the campus Residence Halls.

HONORARY DEGREES

At the 1944 Commencement of the University of Florida, honorary degrees were bestowed upon two outstanding alumni of the University and one scientist of great renown. The Honorary Degree of Doctor of Science was conferred upon Dr. Thomas Barbour, Director of the Harvard Museum of Comparative Zoology, Mr. Herman Gunter, Director of the Florida Geological Survey, and Mr. Eugene Terry Casler, Assistant Manager of the Florida Phosphate Division, International Minerals and Chemical Corporation.

BUILDINGS AND EQUIPMENT

The War Department paid the University 4% on the value of buildings which were used in the war training programs. These funds, added to those available from State appropriations, have enabled us to keep the plant in exceptionally good condition and even to improve some of the buildings. While the shortage of labor has, to some extent, hampered our maintenance service, the physical aspect of the University is, on the whole, better than could have been expected after two and a half years of war.

The Legislature, in its General Appropriation Bill of 1941, made provision for the erection of three new buildings at the University of Florida. These included: (1) an addition to the University Library, $150,000; (2) a College of Business Administration Building, $150,000; and (3) a Dairy Barn, $50,000. The sum of $80,000 was also appropriated for the rehabilitation of the Agricultural Experiment Station Building. Because of the shortage of materials and labor, it was impossible to erect any of the new buildings authorized. By constant and indefatigable efforts, the rehabilitation of the Agricultural Experiment Station Building, begun in the previous biennium, was sufficiently completed to permit occupancy. The renovated building is of fireproof construction

and has a new interior design built into the walls and under the roof of the old building. The available space has been increased approximately one-third. This building was very appropriately dedicated to the memory of Dr. Wilmon Newell, who in 1921 became Director of the Agricultural Experiment Station, as well as Director of the Agricultural Extension Service and Dean of the College of Agriculture. After a period of extraordinary service, Dr. Newell was taken from us by death in 1943.

GIFTS AND GRANTS

The University of Florida, in recent years, has been more fortunate in the recognition of its needs through gifts and grants from private sources than is usual with state-supported institutions. Most of the funds made available to us have come from the foundations. Totaling $130,761.11, they include:

General Education Board for Research in Nutrition, First Half of a $50,00 Grant	$ 25,000.00
General Education Board for the University Library, Second Half of a $40,000 Grant	20,000.00
General Education Board, Work Simplification Project	5,000.00
Alfred P. Sloan Foundation for Project in Applied Economics	28,475.00
State Board of Pharmacy for the Bureau of Professional Relations, School of Pharmacy	7,000.00
Florida Lime Rock Foundation for Experimentation with Lime Rock	15,000.00
Florida Crippled Children's Society for a Special Course in the Summer	425.00
Wallace and Tiernan, Incorporated, Fellowship for Investigations in Chlorination of Water	5,000.00
Florida Federation of Garden Clubs, Horticulture Fellowship	2,000.00
Renewals of the Duncan U. Fletcher and James D. Westcott Scholarships, and the Napoleon B. Broward Fellowship	3,000.00
Renewals of the Sears, Roebuck Agriculture Scholarships	2,305.00
Burpee Horticultural Fellowships for Latin American Students	4,300.00
Vocational Rehabilitation Scholarships	8,256.11
Miscellaneous Gifts, Ranging in Value from $50 to $1,000	5,000.00
	$130,761.11

P. K. YONGE LIBRARY OF FLORIDA HISTORY

Probably the most important acquisition ever received by the University from the standpoint of culture and the advancement of research was the P. K. Yonge Library of Florida History, presented by Mr. Julien C. Yonge, of Pensacola, as a memorial to his father, for many years a member and Chairman of the State Board of Control. No history of Florida, possessing the dignity and scholarship which is worthy of the State, has ever been written. Obstacles which have prevented this have included inaccessability of primary source materials. The Yonge collection consists of a veritable thesaurus of newspapers, maps, pamphlets, books, records, and other materials relating to Florida. It is the largest and most inclusive collection of its kind in existence. One of the conditions of this munificent gift was an agreement by the Board of Control that the collection would be housed as a separate unit in the new wing of the University Library when erected. It has been temporarily placed on one of the floors of the Law Library. The University is already actively engaged in securing increments to this collection, including photostats and microfilms of valuable Floridiana in the Library of Congress.

It is hoped that materials can be brought together rather quickly for an appropriate observance of Florida's Centennial, and that in the course of a few years a worthy history may be written. No state has a richer tradition and back ground than Florida, deep-rooted as it is in Spanish, French, and English cultures.

UNIVERSITY PUBLICATIONS

Aside from the researches in Agriculture, the University has always suffered from a lack of resources for the publication of the researches of its staff. It is manifestly wasteful to pay salaries to persons of creative ability and to buy expensive equipment without being able to publish the results of investigations and researches which have great public value. Furthermore, it is a decisive discouragement to those who are capable of making constructive contributions not to have their researches published.

As is evidenced by the fact that the University of Florida was one of the first universities in the South accorded a chapter of Sigma Xi, recognized as the hall mark of unusual accomplishments in the field of scientific research, the staff has turned out abundant results of research through the years, many of which have remained unpublished because of a false economy. Other institutions have often published the results of our scientific endeavors, thus enjoying in part the credit that should belong to the University, and profiting the states beyond our borders. During the biennium the Board of Control, with the support of the State Board of Education, made available from reserves a revolving fund of $10,000 for the publication of worth-while products of the University staff.

PATENT AND COPYRIGHT POLICY

Closely related to the stimulation of research through publication is the policy in an institution which governs patents and copyrights. Until recently the University did not have a well-conceived plan or policy relating to patents and copyrights. During the biennium regulations covering these matters, based upon studies and recommendations of the University Research Council, were finally established. The patent policy of the University is an epitome of that of the United States Government and similar to that of several other progressive universities. In the achievement of this important stimulus to research, the Governor of the State, the Attorney General, the Chairman of the Board, and others cooperated most effectively.

THE POSTWAR PERIOD

Amid the extraordinary demands made upon the facilities of the University in the war effort, the future has not been overlooked. Various committees have been actively engaged in making studies which will enable the University to move into the postwar period with the prospects of enlarged and more effective programs of service. Ten years ago the freshman and sophomore years of the University curriculum were reorganized in accord with a unified philosophy of education. This gave rise to the General College which is now being adopted in principle by numerous other institutions. The Upper Divisions of the University have been under careful study by postwar planning committees. These plans relate to agriculture, adult education, the social sciences, the biological sciences, the physical sciences, the humanities, including religious education, student health, and other vital matters.

RECOMMENDATIONS

In this report many needs of the University might be chronicled but I will confine myself to two general recommendations.

1. *Plant and Building Requirements.* In the postwar period there is every prospect that the University will be called upon to serve many more students than it has done in the past. The large increase in the population of the State, the suspension of educational opportunities for youth because of the war, the return of large numbers of veterans whose education will be provided for at Government expense, the advertising which Florida has received through the numerous young men who have been stationed in the State in connection with military, naval, or air training programs during the war period, as well as other factors, will provide an unprecedented enrollment. The plant is inadequate to handle 3,000 students. There will be a dire need for classroom space, as well as additional laboratory, library, and recreational facilities.

Therefore, I recommend that the Board of Control urge the Legislature to reappropriate at the earliest feasible moment the amounts for the three buildings provided in the 1941 Appropriation Bill and such additional buildings as may be possible.

2. *Increased Remuneration for Members of the Staff.* Within a decade and a half the State's resources, according to the Comptroller's reports, have practically quadrupled. The annual income from the State has increased from slightly over $33,000,000 in June, 1929, to approximately $118,000,000 in June, 1944. The State funds received by the University in this biennium were only slightly in excess of those available during the first biennium in which I came to the University some sixteen years ago. The 1928-29 State appropriation for the University was $749,152 while the 1943-44 appropriation was $970,425, of which $100,975 was an emergency appropriation to protect personnel in the armed forces and no part of which was used. Accordingly, the increase in State funds during the past sixteen years of my administration was only $120,298. Through the same years in which the State's ability to support the University increased nearly 300%, the actual support of the University by the State increased only about 13%.

The average or median salary at the University of Florida is considerably below that of the average or median salary of similar institutions in the United States. Consequently we suffer a continuous draft upon our human resources. As fast as we develop young men who have brains and ability, they are drained off into other parts of the country. Therefore, because the State is in the best financial condition of its history and is better able to support the University than ever before, I recommend that the Board of Control adopt a budgetary request that will enable the University to increase, as far as possible, the remuneration which may be paid to members of our staff who show merit.

CONCLUSION

As usual, at the close of the biennium, I feel deeply indebted to many persons and have no adequate words in which to express my gratitude. I have endeavored so to steer the University through these difficult war days as to preserve the essential elements of a great institution of learning, assist our nation in the most crucial war in history, and plan for a greater University to serve a greater Florida. In these efforts, I have had uncommon cooperation from my colleagues, both of the administrative staff and teaching faculty, as well as from the students. These two years have been peculiarly burdensome for members of the Board of Control, because of the almost continuous readjustments in staff and

budgetary requirements, not to mention the extraordinary problems arising of necessity from the war situation. I want to thank each of them for his patient consideration and for the constructive help which he has given. Beyond the Board of Control is the Board of Education which has, under the leadership of a Governor who, as an alumnus of the University of Florida, was peculiarly fitted to understand its needs, supported us in every possible manner. And beyond the Board are the people of the State of Florida whose University we are endeavoring to administer. To all of these and others I express my grateful appreciation.

Respectfully submitted,

JNO. J. TIGERT,

President, University of Florida