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, 1940

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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: It is my privilege and honor to submit again the biennial statement covering the high lights and important features in the progress and development of the University of Florida for the two-year period which closed June 30, 1940. As usual, there are appended the reports of the other administrative officers of the University, to which I invite your careful attention. These statements have been kept within short compass, but contain in concise form the essential facts about the University in this two-year period. In no other way can one get so perfect a picture of what is transpiring here.

GROWTH OF THE UNIVERSITY

A state university dedicated to the progressive service of a commonwealth and obligated to produce a continuous professional leadership, and hold aloft the lamp of learning while helping to unfold the material resources which are necessary to provide the sinews of economic structure upon which every society rests, has a dynamic task. Such an institution feels constantly the impact of changing conditions. Recent years have been so filled with change and adjustment which has accrued from local, national and world conditions that the demands made upon a service agency like the University have been almost unprecedented. Just now, every activity at the University is being affected by the universal demand for such adjustments as will promote the national defense and, beyond this, preserve the traditional and fundamental elements of American life and institutions.

In this critical period somehow the University has continued to grow and develop its services with comparatively less with which to do these things. The steadily increasing enrollment which has characterized past years continued and topped all previous records at the end of the college year just closed, in which 3,456 different students were enrolled in the regular session, and 2,805 in the summer session.

Those who have been reached through the extension divisions constitute enlarging circles. The General Extension Division, which carries on instruction on the adult level both for credit and non-credit in various parts of the State, as well as correspondence courses, library service, education by films and other visual aids, and in numerous other ways, offered useful instruction during the biennium to 13,387 adults in 415 different communities scattered in every county of the State. The monthly enrollment in extension courses was around 500 persons. Nearly 350,000 persons were reached through the loan of books, educational films and other materials; 5,456 were enrolled in correspondence courses, and 4,822 participated in 28 different short courses. In addition to this, there was a very important program of service rendered to our farm population through the Agricultural Extension Division. This work, set up on a national scale and subsidized by the Federal Government, has become increasingly effective through the years and has unquestionably improved the economic and cultural standards of our rural population. A chief objective of this educational program is to keep farmers upon the land, and enable them to make a profit for a livelihood. During the past year alone some 18 publications were issued by this service, totaling 364,400 copies, which went

to the farmers and homemakers of Florida; 139 county and home demonstration agents, including some Negroes, gave a total of 13,301 days in their offices and 15,773 days in the field. The county agents, assisted by specialists from the University, have been bringing to the farmers in every corner of the State the latest and most effective methods in dairying, marketing, farm management, food production, citrus culture, production and conservation, live stock and poultry, and countless other valuable contributions have been made. Meanwhile, the wives in the homes have acquired increasing knowledge regarding textiles, nutrition, etc. These activities were supplemented by the 4-H Clubs and by more than 1,000 radio talks, particularly over the University Station WRUF, that have dealt with matters helpful to farmers and dedicated to the improvement of our rural life.

A primary obligation of the University is to provide education for the young men of the State, particularly for those who are to be the leaders, the professionals and the researchers, and upon whose shoulders almost the full responsibility for the development of the State will depend. To provide this instruction the resources of the University are being taxed to the limit. In spite of the increasing enrollment and the inability of the State to increase the resources of the University, we believe that the standards and quality of work and service have not been materially lowered during the two-year period; in fact, there have come some additional evidences of a high quality of work being performed.

RESEARCH

Parallel with, and hardly secondary in importance to this obligation of education and training of the leaders of tomorrow, is the constant necessity of scientific research, without which the social and economic condition of a state would stagnate and eventually deteriorate. The greatest effort and the largest resources which are available for research at the University are in the field of agriculture. The State is now expending more than one-half million dollars annually in scientific investigations looking toward the improvement of agricultural industry and its related fields. This is as it should be, because agriculture is the basis upon which our State rests.

Much valuable research is being done in other directions with slender resources and an over-worked personnel. As an evidence of accomplishment in these fields not long ago the University was accorded the distinction of Sigma Xi, a national honor fraternity which symbolizes outstanding work in general scientific research. Few universities in this section have received this recognition.

Later on I will have occasion to speak of the needs of the University. In passing, it should be said that the time is ripe for some assistance from the State treasury to the Engineering Experiment Station in order that it may perform a service to industry which is similar to that which the Agricultural Experiment Station is performing for agriculture. The Bureau of Business Research should also have more financial resources in order that commerce and the business interests of the State may enjoy a similar support and stimulation. Some very valuable studies have been made in this field, but they are all too few, and the instructional staff of the University is required to make undue sacrifices for the purpose.

Some years ago a careful survey revealed the fact that the research program of the University was contributing annually approximately twenty-five million dollars to the economic structure of the State. I am sure that this contribution has been increased during the past biennium, though the financial resources have remained practically at a standstill.

PHYSICAL PLANT

During the two years, buildings and plant expansion have been added amounting to a total of $960,688.04. In some respects this would appear to be a satisfactory situation; however, when it is noted that $870,436 of this has been derived from the Federal Government, which means that those plant additions which in some way could be made self-liquidating (at least in part) are the only ones that could be provided, it is evident that a very unbalanced situation has developed. Dormitories, for example, have bulked very largely in the increase. On the other hand, classrooms, which are becoming constantly more and more inadequate, have been increased by no new building, and only in a very small way by the evacuation of some space that was made over for classroom purposes. This will be referred to later when I come to speak of needs. I append at the end of this report a statement of all buildings and improvements, with costs and sources of funds, during the biennial period 1938-40.

Two new dormitories constructed by loans and grants from the Public Works Administration, were opened last September. These buildings, named in honor of Senator Fletcher and President Murphree, accommodate respectively 234 students and 376 students.

The total dormitory capacity of the University is now approximately 1,100 students, which is about one-third of the enrollment in the regular session.

With the enlargement of dormitory facilities, more thought has been given to the social and scholastic side of student residence. A Committee on Residence has been appointed, and under this Committee a Director of Residence has worked with the hope of improving the conditions of life for students in residence halls. Beginning in 1939 all freshmen have been required to reside in the halls, unless they are residents of Gainesville or are within commuting distance of the University. The dormitory system is concentrated and centrally located. The new buildings are among the best that have been erected at the University and contain lounges for social purposes. The improvement in the student residential life is one of the outstanding features of the biennium.

FRATERNITIES

Closely related to the system of residence halls are the fraternity houses that surround the campus.

The fraternity situation at the University of Florida is a wholesome one. The undemocratic spirit surrounding fraternity life which prevails at some institutions is not recognizable here.

We have 21 national fraternities and one local, with a combined membership of 888 men, most of whom live in the fraternity homes, 20 of which are owned and only 2 of which are rented. Recently, steps have been taken to provide safeguards against over-building and unwise housing programs. No serious complications have developed from financial debacles among fraterni-

ties at the University of Florida though such catastrophies have been barely averted. With the expanding dormitory system, it seems wise to give more careful thought and planning to the correlation of dormitory and fraternity residence. During the biennium, four new fraternity homes have been built, all of which present attractive and substantial appearances, and are soundly financed. It should be noted that these fraternities have relieved the State of a large financial obligation by providing residential facilities for nearly 800 students.

One unfortunate tendency in fraternity development here is being corrected. In recent years some of the chapters have grown beyond the size of fraternities and have resembled clubs, with a membership around 100 or more. In two fraternities which have more than 100 chapters in the country the University has, until recently, had the largest chapters. This situation has not been best for the fraternity system as a whole or for the individual chapters. The Inter-Fraternity Conference has given the problem a good deal of thought, and a plan has been worked out for gradually correcting this situation. The addition of other strong nations will tend to correct it. In the near future we are looking forward to bringing several of the strongest nationals not represented at the University of Florida to our campus. Phi Gamma Delta, an outstanding national, has already voted to cast its lot with us.

ATHLETICS

In popular interest, athletics holds a primary place in University life. At the University of Florida, as in most institutions, the athletic program has been considered an integral part of the education of students. It has been the thought of the administration that whatever of physical, social, moral or other kind of value may be derived from athletics should accrue to the students and should constitute a part of their training and development. There are a few institutions in which the educational phase of athletics has been subordinated to the thought that athletics is an instrumentality for making money, entertaining the public and advertising the institution. The latter have been on the decrease in recent years. There has been a growing consciousness not only among educationists but with the public at large that possibly the price that has been paid for football is too great.

Periodically, there have arisen appeals and desires from certain groups that the University of Florida should win more football games and aspire to a championship team, whatever that may mean. During the past biennium, the sentiment in this direction reached a culmination. With the resignation of Mr. Josh Cody, Athletic Director and Head Coach, a cooperative effort has been made by the Board of Control, the Faculty Committee on Athletics and the President of the University to respond to this sentiment so far as it is possible to do so without impairing the educational standing and outlook of the University. After a careful search and the examination of more than sixty applications, and after conferences with a considerable number of men, it was unanimously agreed to invite Mr. Tom Lieb, who has had quite a wide experience as a coach at Notre Dame, Wisconsin and Loyola University of Los Angeles, to assume the leadership of a sound and progressive athletic program at the Univerity of Florida. Mr. Lieb is not only technically well

equipped, but we believe is a man of unusually high character, and his appearance at the University last April has been followed by an apparently wide and sincere appreciation for him not only by students and alumni, but by citizens throughout the state.

SCHOOL OF TRADE AND INDUSTRIAL EDUCATION

In the brief compass of this report we cannot review many of the features that witness the educational progress of the past two years. Among the outstanding features is the School of Trade and Industrial Education which was established in the summer of 1938 with the cooperation of the State Department of Education. This School undertakes to provide fresh training for teachers of vocational and continuation schools. In its first year 403 students were registered in the two three-week terms. In 1939 work on the graduate level was added, and a third three-week term was offered with a total enrollment of 532 students for the summer. In 1940 with a continuation of three-term sessions, a total of 542 students have been enrolled. This School now serves all the states east of the Mississippi River and is probably the largest in point of enrollment in the United States. Registration during the past summer represented some 20 states.

DEAN OF THE UNIVERSITY

Another step in academic progress was taken during the past year with the establishment of the office of Dean of the University, and the appointment of Mr. H. W. Chandler, formerly Registrar, to this position. The press of administrative details and numerous conferences greatly militated against the possibility of the President of the University giving careful consideration to many educational problems relating to the curriculum, instruction, teaching loads and related matters. It seemed desirable to provide someone, working directly under the President, who might have greater freedom in making available for the President's office studies that will serve to guide the administration in its attempt to improve instruction and plan academic procedures.

It is hoped that the Dean of the University will be able to carry out this function and contribute greatly to the production of these imponderable elements which are of the essence of real academic progress.

DIVISION OF LANGUAGES AND LITERATURE

An evil which has been generally decried in academic circles of late and which is prevalent in most colleges and universities is the over-specialization and departmentalization of the curriculum. Various movements have been inaugurated in the hope of overcoming these deficiencies. Integration of subject matter and departmental organization has been the watchword among some progressive educational institutions of late. The University of Florida has been in the vanguard of these progressives. Five years ago it boldly integrated the specialized curricula of the first two years into the comprehensive courses of the General College without departmentalization.

During the biennium just closing a notable integration has taken place in an important field of learning. What were formerly entirely distinct departments of modern languages (including English as well as foreign) and ancient languages, have been brought together in a single division with

a Chairman, in the hope that the wastage from rivalry, over-specialization and duplication may be eliminated and a finer, broader program of language study and appreciation may be projected. In the short time that this Division has existed there are evidences which offer bright promise for the future.

GIFTS AND GRANTS

In the period under review the total gifts and grants for the stimulation of research and educational progress have amounted to $55,413. These include fellowships and scholarships available at the University of Florida totaling $11,550, and fellowships available to members of the faculty of the University of Florida at other institutions totaling $7,800. The latter were all grants of the General Education Board.

Among the agencies that have granted fellowships and scholarships at the University, and to whom appreciation is hereby acknowledged, are: The Rockefeller Foundation, the United States Sugar Corporation, the General Tung Oil Corporation of New York, The Tennessee Corporation, The American Cyanamid Company, the Florida Federation of Garden Clubs, The Freeport Sulphur Company, and Sears, Roebuck Company.

Gifts totaling $30,307 have been made, chiefly by the foundations, for research on special problems.

The General Education Board made available a sum of nearly $15,000 as a sponsor's contribution toward a $60,000 addition to the P. K. Yonge Laboratory School for which the Board had originally made a contribution of $150,000. The General Education Board also made a grant of $2,000 to finance a survey of the Library, under the auspices of the American Library Association.

Other grants include $2,000 from the Carnegie Endowment for International Peace toward the financing of an Inter-American Educational and Cultural Conference at the University of Florida, April 14-20, 1940, $1,750 from the Southern Association of Colleges and Secondary Schools for a summer workshop program at the University, and $9,850 from the Alfred P. Sloan Foundation toward financing projects in applied economics. In addition to these there were miscellaneous gifts of equipment, books, and cash totaling $5,756.

THE FUTURE OF THE UNIVERSITY

A consideration of the growth in the enrollment, the enlargement of the plant and the new services which the University has been compelled to assume in recent years, together with the failure to increase the financial support through State appropriations, makes it difficult to see how the University is to continue without a rather serious depreciation in the quality of the work and the kind of service which is to be rendered in the future. In 1930-31 the University realized $814,283.88 out of an appropriation of $851,-884.50. During the year which closed June 30, 1940, $835,449.90 was realized from an appropriation of $945,000. This means that the increase of money made available to the University by the State in the last nine years is only 2.6%. Some additional appropriations have been made by the Legislature during this time, but considerable amounts thus appropriated have been denied the University biennium after biennium because it was thought that the State revenues were not sufficient to take care of the appropriations.

The University has endeavored to cooperate with the Budget Commission, the Board of Education and other State officers in these matters; however, it is pertinent, I think, to call attention to the fact that in 1930-31 the total treasury receipts for the State of Florida as recorded by the Comptroller were $43,181,539.37. For the fiscal year just closed the Comptroller announced the treasury receipts as $75,491,093.24, the largest in the history of the State, and representing an increase of 74.82%, over the receipts of 1930-31. That is to say, while the State's revenues have been increasing 74.82%, the State's support of the University has increased only 2.6%, and the latter figure grows largely from the fact that it was believed the State did not have funds to do anything more for the University.

The time has arrived when the State must share its increased revenues with the University or it will be condemned to progressive deterioration, which has already begun to set in. A prime consideration in the deterioration of the work of the University is the drag of strong personnel from the faculty and staff. Wilson Gee, in his study RESEARCH BARRIERS IN THE SOUTH, found "A comparative study of average salaries actually paid for instruction by ranks, and the salary ranges in the South and in the North and West shows that on the average Southern professors are paid around one-third less than their colleagues in other parts of the nation." Add to this the additional fact reported by Mr. Gee "On the average, the Southern professor carries a teaching load approximately 30 per cent greater than his Northern or Western colleague," and it becomes evident that unless something is done to raise the comparatively low salaries that are being paid in this region, and teaching loads lightened, our institutions of higher learning which are already backward, will experience still greater losses.

As a result of low salaries and heavy duties compared with other institutions, the University of Florida has been steadily losing valuable members of its staff in recent years. During the past five years 38 of the better members of the staff have left. Of the 19 whose new salaries are known, the average increase over salaries received at the University of Florida was 64.9%. There are instances where salaries were increased twice as much, and in one instance three times as much as the salary paid at the University of Florida. The salary schedule at the University of Florida is now lagging behind that of the relatively low amounts paid in neighboring institutions. There are now 48 persons on the staff of the University who are receiving the same or less salary than in 1930-31. The actual amounts of reduction in pay run from $2,800 down to zero. The average reduction in salary of these 48 persons over the nine-year period is $318.23.

It has been pointed out that the teaching loads in the South on the average are about one-third greater than in the Nation. The teaching loads at the University of Florida are even heavier than in the South as a section. In this regard there are few universities in the Nation which are suffering as severely as the University of Florida. The ratio of the number of students to the faculty at the University of Florida is among the highest in the United States. Among the privately endowed institutions there is an instructor provided for very small groups of students. Taking a few at random: at Johns Hopkins it is 2.5, at Vanderbilt 3, at Harvard, Emory and Columbia University 4. Some of the state-supported institutions approximate these figures:

at Pennsylvania State College there is one instructor for 5 students, at the University of Maryland one instructor for 6 students, at the University of Virginia one instructor for 8 students. In comparison with these figures, the University of Florida provides one instructor for 17 students. This not only makes it difficult to maintain a high quality of instruction, but makes it impossible for the faculty to render counsel and guidance to a great many students. The latter is especially important for students in the General College who are endeavoring to discover themselves and arrive at a conclusion regarding whether they should remain in the University, and if so what kind of specialty they are capable of pursuing in the upper division.

APPROPRIATIONS REQUESTED FOR THE BIENNIUM 1941-43

With the above facts it is to be remembered that the enrollment of the University has increased over 50% in the last decade, and the plant more than doubled. When all of this is considered, it is apparent to a superficial observer that relief must be provided in the immediate future if anything like satisfactory standards are to be maintained. Therefore, in the requests that are here submitted for appropriations in the next biennium modest increases are being asked.

For the University proper, the new budget which we are proposing would involve an increase of 17.49% over the amount realized in the fiscal year just closed. This amount involves increases of 15.41% in salaries, and 25.88% in upkeep. It is clear that we are asking relatively more for upkeep than for salaries; this is essential if the plant which has been neglected through a number of years of economy and depression is to be maintained in a satisfactory, usable condition. Much equipment that has been required in recent years has not been bought because funds were not made available. Necessities must be provided or failure ensues.

The amounts requested for the Agricultural Experiment Station in the new biennium are approximately the same in the increase over the amounts realized during the last year as those asked for the University. The percentage of increase for the Agricultural Experiment Station is 17.06%, which is divided almost equally between salaries and upkeep. The last Legislature gave more liberal relief to the Agricultural Extension Service in its appropriations than to the University or the Experiment Stations, but the percentage of new funds which have been released for operation have been relatively less; we are therefore asking for an increase in the Agricultural Extension Service which is somewhat greater than that of the other two units.

A building budget of $400,000 is being requested. The last Legislature appropriated $238,000 for building funds at the University; of this amount only $7,500 has been realized. This situation is all the more deplorable in that $138,000 of this appropriation constituted sponsor's contributions that would have given the University one-half million dollars in new buildings. Possibly some of this may be realized in the future as the appropriations are continuous, but at the present the situation is most discouraging.

The Agricultural Experiment Station Building was condemned about fifteen years ago and for some time has been shored up with beams. An appropriation of $80,000 made available for rehabilitating this structure was vetoed by the Governor due to a lack of revenues. In the building budget for the new biennium we are asking $80,000 for the rehabilitation of the Experiment

Station Building, $150,000 for a building for the College of Business Administration, $150,000 for an addition to the Library, and $20,000 for equipment and stacks for the Law Building Annex. The College of Business Administration in a few years has grown to be one of the two largest colleges on the campus in point of enrollment. As has already been pointed out, in the last ten years there has been practically no increase in classroom space at the University. This item must be attended to or temporary buildings will have to be built that will be unsatisfactory and unsightly. The Dean and faculty of the College of Business Administration are scattered about in various nooks and corners of the University, some of them being placed in one of the old dormitories.

No university can develop without library facilities. The library is the heart of an institution of learning, and its work correlates directly with the library facilities provided. Books and space at the University of Florida are sadly deficient, and we are lagging behind other institutions in this section. Oftentimes there are no seats in the Library for students who desire to use books, and the collection of books is becoming relatively less adequate each year. A survey of the Library under the auspices of the American Library Association, from funds provided by the General Education Board, has pointed out clearly that some constructive measures must be taken at this point or the future spells disaster.

A new fireproof annex to the Law School which will provide quarters for its library is rapidly approaching completion. This new building, which will provide a much needed service and protection, will be useless unless funds are provided for equipment and stacks. A minimum estimate for this is $20,000.

In concluding this report, I wish to express appreciation to the Board of Education, the Budget Commission, the Board of Control, and other State officials who, as in the past, have cooperated in solving the many problems that have arisen during the past biennium, particularly of a financial character. I am also grateful for the cooperation that has been extended to the administration by the faculty and staff, and I must pay tribute to the fine student body which in spirit and in conduct seems to improve from year to year. It is one of the compensations that I enjoy in a somewhat difficult task that the young men who are at the University as a whole support the University program with unusual loyalty.

Respectfully submitted,

JNO J. TIGERT,
President, University of Florida

BUILDINGS AND IMPROVEMENTS—COSTS AND SOURCES OF FUNDS—1938-1940

	From State	From Federal Government	From Gifts	Earnings Or Other	Total
Duncan U. Fletcher Hall (Dorm)	$	$296,000.00		$	$296,000.00
Albert A. Murphree Hall (Dorm)		460,000.00			460,000.00
Sprinkling System and Landscaping	8,600.00	12,986.00			21,586.00
Improvements to 3rd Floor P. K. Yonge Laboratory School		45,703.00	14,707.00		60,410.00
Completion of Union Dining Room				2,300.00	2,300.00
Tung Oil Buildings erected by Bureau of Plant Industry		7,500.00			7,500.00
Repair work on Vegetable Crops Lab. dwellings, Manatee	500.00**				500.00
Improvements at Austin Cary Memorial Forest—Barracks, classroom, trails, etc.		25,412.00			25,412.00
Four Buildings at North Florida Experiment Station	4,538.00**	11,627.00			16,165.00
Building at Sub-Tropical Experiment Station, Homestead	2,238.00**	7,208.00			9,446.00
Building at Pecan Experiment Station, Monticello	800.00**				800.00
Camp Wauburg, Supervisor's Residence				2,804.00	2,804.00
Miscellaneous improvements under $1500 such as repair to toilets, partitions, repainting, etc.				9,890.04	9,890.04
Miscellaneous improvements such as installing linoleum, tile floors, wood work, etc.	10,000.00				10,000.00
Central Heating Plant Building and Installation of oil burning equipment	7,500.00*			22,500.00	30,000.00
Abattoir				1,000.00	1,000.00
Tobacco Grading House	2,000.00**				2,000.00
Tobacco Curing Barn	600.00**				600.00
Agronomy Building (Field Crops Lab.)		3,500.00			3,500.00
Plant Introduction Lab. Building		500.00			500.00
Poultry Houses				275.00	275.00
1938-40	$ 36,776.00	$870,436.00	$ 14,707.00	$ 38,769.04	$960,688.04

* From Building Funds—Other amounts from University Operating Funds.
** Special State Appropriations—Agriculture, Forestry, etc.

REPORT OF THE DEAN OF STUDENTS

To the President of the University.

SIR: During the past biennium the Office of the Dean of Students has had no change in personnel. The activities of the office have continued with the same objectives as initiated with the origin of the office as a part of the administrative set-up of the University. Briefly stated, an attempt is made to secure the cooperation of students and faculty in dealing with the student life of the campus. While the office acts as a clearing center for student life and activities, other departments and individuals cooperate in meeting demands for guidance and counseling. Even though the depression has passed through its most serious stages, a great deal of time and effort has been spent in helping students work out their financial problems. These problems involve employment, loans, scholarships, and other kinds of self-help.

A tabulation of the activities and responsibilities of the Office of the Dean of Students might be outlined as follows:

Work with individual students. Work with the faculty in dealing with student-faculty relationships. Student government, and other student extra-curricular organizations. Committee on Student Residence. Inspection of rooming houses and publication of approved lists of rooming facilities. Social fraternities. Student social affairs. Honorary fraternities, societies, and clubs. Scholarships and loans. University employment and self-help. Administration of the NYA student aid program. Placement. Freshman Week. Conduct and discipline. University regulations.

Although there has been no appreciable increase in the budget of the Office of the Dean of Students for the present biennium over the previous one, the work of the office has shown a considerable increase in the number and type of the activities coming under its direction. In the first place, there has been a considerable increase in the student body enrollment. Then, on the other hand, numerous activities have been added to the duties of the office thereby occasioning more work on the part of the staff. Among those activities that have been added, the following are mentioned:

(a) Chairmanship of the Committee on Residence, involving the appointment of a Director and the working out of a satisfactory set-up of the dormitory system. The opening of the new dormitories increased the dormitory population from 585 to 1,100 students.

(b) Chairmanship of the committee responsible for the investigation of all new fraternity buildings, additions to present buildings, and leases of fraternity organizations. During the period of the last biennium, four new fraternity houses were built. Several other fraternities have made plans and have consulted the committee concerning the erection of new houses, others have made additions, and a number of fraternities that do not own houses have made rental and lease agreements in which the committee has acted in an advisory capacity.

(c) Expansion and enlargement of the placement service for graduates and former students who are seeking employment. The demand for employ-

ment of university graduates has shown considerable increase during the year 1939-40.

(d) Chairmanship of the Board of Trustees responsible for the supervision of the estate donated to the Cooperative Living Organization by Dr. Joseph R. Fulk as a memorial to his late wife, Nellie Swanson Fulk.

Respectfully submitted,

R. C. Beaty, *Dean of Students*

REPORT OF THE BUSINESS MANAGER

To the President of the University.

Sir: I have the honor to submit herewith a report of the Business Office and its subsidiary activities for the biennial period ending June 30, 1940.

This report includes a complete financial statement and balance sheet for all Colleges and Departments of the University, the Agricultural Experiment Stations and Agricultural Extension Service, as well as such auxiliary activities as Cafeteria, Bookstore, Soda Fountain, et cetera. Detailed reports are printed annually as exchange publications and copies are available for general distribution.

Budget recommendations for the Business Office and Maintenance Departments for the biennium ending June 30, 1943, have been submitted to you with certain increases in salaries, upkeep and plant maintenance. The amounts are not large, but are intended to take care of the increased cost of living and additional duties and responsibilities required of the employees.

BUSINESS OFFICE

With the increased enrollment, changes and improvements in Colleges and Departments of the University, and manifold transactions required in collection of student fees, rentals, et cetera, purchasing of supplies and equipment, and preparation of vouchers and reports for payment of operating expenses, this Office has operated on less than 1% of funds handled. We hope to increase our efficiency by reallocation of work of personnel, and by the addition of a new accounting machine which will speed up the preparation of numerous reports and other information this Office is called upon to furnish.

We are handicapped by lack of adequate and convenient office facilities and space and hope this may be taken care of in the future by an increased building program.

MAINTENANCE DEPARTMENT

BUILDINGS

Many improvements have been made in the physical plant during this biennum, by rehabilitation of present buildings—to secure more satisfactory use of space and make them more livable and up-to-date.

The construction of the new dormitories, Hydraulic Laboratory, completion of the third floor of the P. K. Yonge Laboratory School, the Auditorium of the Chemistry-Pharmacy Building, and the remodeling of Section "F" Thomas

Hall, have added to the plant investment approximately a million dollars, from an expenditure of not more than $20,000. State Funds, and the balance from W P A, P W A and General Education Board Funds.

In addition to these the Maintenance Department has constructed a Central Heating Plant of brick and stone, which has long been needed, at a cost of approximately $12,000. This plant houses three boiler units, which last year were converted from coal to oil burning equipment, at a cost of $20,000, making the coal bunker storage space available for a Steam Laboratory for the Engineering College. Professor N. C. Ebaugh, campus engineer, has submitted a report showing comparison of fuel costs for coal used in 1938-39 as against oil in 1939-40, taking into consideration 88% increase in weather intensity and increased radiation, which shows a saving, due to use of oil and plant improvements, of $6,302.07.

Other outstanding improvements are as listed—

Installation of hot water heating system in Radio Station - - -	$1,264.23
Completion of fourth floor Florida Union—for Inter-American Affairs Offices -	1,393.07
Removing stone parapets fourth floor—Sledd Hall—to improve light and ventilation in rooms - - - - - - - - - - - -	1,071.85
Rehabilitation of toilets—Peabody Hall - - - - - - - - - - -	1,285.02
Rehabilitation of toilets and lavatories—Section "B" Buckman Hall	260.17
Rebuilding three laboratories—Agricultural College - - - - -	1,101.35
Rebuilding new X-Ray Room—Infirmary - - - - - - - - - - -	544.08
Conversion of north entrance Language Hall—into offices - -	688.76
Repairs to and repainting—Basketball Court - - - - - - - -	902.15
Partitions in Library—to make office for Dean Chandler - - -	381.36
Fire ladders installed on buildings—as safety measure - - - -	1,000.00
	$9,890.04

Other less extensive improvements include general repair work to buildings, installation of linoleum and tile floors in halls and offices of a few of the old buildings, amounting to approximately $10,000.

Through N Y A we have been able to secure a building and equipment for a shop project, to take care of approximately thirty students. This has been of great value to the University in the building of equipment at a saving, with the expense of materials and use of this student labor. In this wood working shop we built 605 student study desks for the dormitories, also desks for various class rooms. We also built casement windows for new construction.

The Barracks, which was built in 1917, and one of the last remaining eye sores on the campus, was razed, and the material used at Lake Wauburg for the construction of a Recreational Building.

For the Experiment Station we report building and improvements on campus and branch stations as follows:

Tobacco Curing Barn and Warehouse; Calf Barn; Field Crops Warehouse; Plant Industry Field Laboratory, one building in Poultry House Unit, and Abattoir at a total cost of $9,075.

Also three frame buildings brick veneered under the W P A Project, five wells drilled, and tanks and towers erected.

Agronomy Building and Tenant Houses, No. Fla. Experiment Station, Quincy -	4,250.00
Caretakers Cottage, Sub Tropical Station, Homestead - - - - -	3,000.00
Garage and Storage House, Pecan Investigations Laboratory, Monticello -	1,000.00
	$8,250.00

GROUNDS

The campus continues to elicitate praise from all visitors, which means constant attention and frequent plantings to keep it up.

The installation of the W P A Sprinkler System along Ninth Street has been most helpful in the beautification of this area.

The addition of the new road, made available by the State Road Department, has made it possible to beautify the area around the dormitories, and to use the old road material for sidewalks.

Five hundred oleanders, two hundred azaleas, camellias, and other flowering plants, most of them propogated in our nurseries, have been set out around the Hydraulic and Photographic Laboratories, new dormitories and Tennis Courts. Ligustrum hedges have been planted, and a formal planting made at the Masonic Street Entrance.

More than 10,000 square feet of new, and 4,400 of old, cement sidewalks have been laid from salvaged materials, mostly from the Tennis Courts.

The Spur Track, which has been such a valuable asset to the University, has been repaired and serviced regularly. Replacement of 500 new ties have been made, and tons of soil placed along the track.

The P. K. Yonge Laboratory School grounds and the Athletic Field have had new plantings, and had their share of beautification and attention, which has been necessary to merit the favorable comment we are receiving.

ELECTRICAL MAINTENANCE DEPARTMENT AND TELEPHONE EXCHANGE

By continuous vigilance the department has been instrumental in the protection of equipment and maintenance of electrical service, and has definitely contributed to the safety of the personnel and the control of the use of electricity. The figures shown below give the number of KWH, the amount paid, and the cost per KWH for 1929-1939:

	KWH	Amount Paid	Rate per KWH
1929	402,960	$16,764.22	4.150¢
1939	1,527,060	17,636.25	1.155¢

For less than $1,000 increase in cost the University has been able to use almost four times the number of KWH of electricity.

The addition of the new dormitories has made an appreciable increase in the number of KWH used and the amount payable during the next year.

Supervision and labor for improvements in the wiring and lighting facilities in most of the building projects, machine shop and architectural drafting room, have been made during the last biennium.

The department is installing the wiring in connection with the rehabilitation of Section "E" Buckman Hall, and the electrical work in the Law Library Stack-Room Building, as it has in most of the other W P A Projects.

A permanent inventory system has been installed in order to keep up with the stock and facilitate the work. All possible work in connection with bookkeeping, billing and records, has been transferred to the automatic bookkeeping machine in Language Hall.

A record system is being set up for all cables and larger pieces of equipment so that they may be checked at regular intervals, in an attempt to anticipate trouble and prevent failure of service and damage to equipment.

The telephone service has been improved in this period by the use of N Y A labor, and adjustments in 'phone service. We now have 165 telephone lines on our switchboard, which is about a maximum capacity. We hope to keep the overhead low by the installation of some inter-office communication sets.

MILITARY PROPERTY

Recent improvements in the Military Supply property room have notably increased the efficiency in handling the U. S. Government property. Uniforms and equipment are now being issued and checked in more systematically, with practically no loss due to the records kept by the Assistant Military Property Custodian.

The change in the uniforms as recommended by the PMS&T and his staff have proven a wise move, and the advanced students have two suits instead of one from their commutation allowance.

CAFETERIA

The University Cafeteria is a self-supporting, non-profit organization. It is operated for the convenience of the student body, and as a price regulator (both for food and hours of service rendered) for eating establishments that cater to the students. Its ultimate aims are to care for the health of the student body, to serve and to please. It is supervised by dietitians—whose goals have been the purchase of high quality materials for flavor, texture, and for the best returns; using products that are in season, so as to get the benefit of their best flavor and reduced prices; to offer well balanced meals; to offer a wide variety so as to cater to varied tastes and students on different financial levels; to offer foods that are well prepared and attractively served. Approximately 1,800 meal units are served per day, in addition to special banquets.

A new checking system installed has proved helpful in handling our increased patronage.

Sixty-two students were employed this past semester, in the following capacities: cashiers, checkers, student manager, bookkeeper, typist, bus boys, dish washers, and for cleaning. The student manager and bookkeeper both have responsible positions so are on a salary basis. The other students work three hours daily, and receive three meals, the equivalent of 30¢ per hour, in return for their services. Students are paid in cash, at the rate of 25¢ per hour, for any overtime service.

BOOKSTORE

This department is operated on as close a margin of profits as possible, and has as its objective the greatest possible service to the students.

Along with the regular textbooks and supplies are carried such college items as seal jewelry, pennants, and other novelties which are popular with the student body.

The faculty are sent order forms to approve, making requests for text books and supplies, which means greater cooperation and better service, and makes possible the purchase of used text books from the students for resale. The new students are then given the advantage of the second hand price. This is a service that has been greatly needed, and it is hoped that more can be done along this line in the future.

It is the policy of this department to employ student help, whenever possible, and five students were employed the past year. Their earnings were approximately $25 per month, to help defray their expenses while at the University.

SODA FOUNTAIN

Administered as a non-profit organization it has two major objectives: First—to supplement the work of the Cafeteria, by providing quick lunches, salads, sandwiches, and continuous fountain service for students and faculty, at reasonable prices with high quality products; Second—to furnish employment to students so that they may earn a part of their college expenses. An average of 750 customer units are served each day. During the past year 51 luncheons, or special dinners, were served in the University Banquet Hall.

Twenty-three students were employed, each earning an average of $21 per month.

The volume of business for the year 1939-40 increased approximately 10% over the previous fiscal period.

This department has outgrown its present quarters and the need of additional space for more efficient service is urgent.

DUPLICATING AND PHOTOGRAPHIC DEPARTMENTS

The Duplicating Department has been moved from the Barracks to the Photographic Laboratory Building, where space is adequate for its present needs. At the same time it combined the work of the Photographic Laboratory in order to make a more efficient and economical operation. The photographic work consists mostly of Publicity pictures, pictures of experiments conducted by the Agricultural Experiment Stations and College of Engineering, lantern slides and identification pictures of all students who attend the University. The department employs two Engineering students as photographers in cooperation with the Florida Industries Cooperative Plan.

The equipment of the Duplicating Department is essentially the same as it has been for the past two years. Some of it has been in use for many years and should be replaced. This would greatly increase the efficiency of the department.

The Duplicating Department is entirely self-supporting and receives its operating funds by transfers from other departments, for services rendered.

A cost-finding system has been installed to determine the cost of the work produced and the respective departments are billed accordingly. The total business handled is approximately $23,000 per year, with a saving of not less than 20% to the University.

There are five full time employees and nine part-time students employed by the department.

In conclusion let me call attention to the figures showing increase in plant investment since the last report of $1,150.000. A large part of this amount was made available from W P A, P W A and the General Education Board.

In addition to the need of more space for the business offices, we must have a Central Stores Building for handling all stock, equipment and supplies. This is necessary as an economy measure and could be built for $6,000.

Respectfully submitted,

K. H. Graham, *Business Manager*

FLORIDA AGRICULTURAL EXPERIMENT STATIONS AND AGRICULTURAL EXTENSION SERVICE
REPORT OF INCOME AND DISBURSEMENTS—1938-1940

	Income 1938-39	Disbursements 1938-39	Reverted 6-30-39	Income 1939-40	Disbursements 1939-40	Balance Forward 7-1-40
STATE APPROPRIATIONS						
Main Experiment Station	$165,551.69	$165,551 69	$	$	$	$
Salaries				91,200.00	88,096.74	3,103.26
Necessary and Regular Expense				91,419.00	77,103.98	14,315.02
Vegetable Crops Laboratory	21,710.65	21,710.65				
Salaries				2,400.00	2,400.00	
Necessary and Regular Expense				12,600.00	10,864.10	1,735.90
Strawberry Investigations Laboratory	6,321.22	6,321.22				
Salaries				4,800.00	4,294.40	505.60
Necessary and Regular Expense				1,500.00	1,164.60	335.40
Citrus Disease Investigations	3,508.86	3,508.86				
Salaries				3,060.00	3,060.00	
Necessary and Regular Expense				440.00	436.81	3.19
Potato Disease Investigations	7,020.33	7,020.33				
Salaries				7,600.00	4,947.09	2,652.91
Necessary and Regular Expense				2,400.00	2,391.00	9.00
Potato Laboratory at Hastings	2,074.74	2,074.74		2,000.00	1,260.00	740.00
Pecan Insect Investigations	5,066.53	5,066.53				
Salaries				1,300.00	1,300.00	
Necessary and Regular Expense				2,850.00	200.36	2,649.64
Celery Investigations Laboratory	10,000.00	10,000.00				
Salaries				9,900.00	6,946.45	2,953.55
Necessary and Regular Expense				5,100.00	4,233.45	866.55
Fumigation Research	3,062.50	3,062.50				
Salaries				2,400.00	2,400.00	
Necessary and Regular Expense				662.00	404.94	257.06
Grape Pest Investigations	3,500.00	3,500.00				
Salaries				2,520.00	2,520.00	
Necessary and Regular Expense				980.00	980.00	
Citrus Experiment Station	46,452.29	46,451.79	.50			
Salaries				51,472.00	36,324.76	15,147.24
Necessary and Regular Expense				19,979.00	19,971.98	7.02
Everglades Experiment Station	45,626.28	45,626.28				
Salaries				18,792.00	16,524.50	2,267.50
Necessary and Regular Expense				26,547.00	20,048.13	6,498.87
Everglades Continuing Fund, Chapter 8442	5,000.00	5,000.00		5,000.00	5,000.00	
North Florida Experiment Station	25,968.00	25,968.00				
Salaries				10,284.00	9,297.64	986.36
Necessary and Regular Expense				15,684.00	14,397.71	1,286.29
Sub-Tropical Experiment Station	22,268.63	22,268.63				
Salaries				12,300.00	11,166.00	1,134.00
Necessary and Regular Expense				8,700.00	8,436.90	263.10
Watermelon Investigations Laboratory	7,000.00	7,000.00				
Salaries				6,600.00	4,200.00	2,400.00
Necessary and Regular Expense				3,400.00	2,799.90	600.10
Special Dairy Investigations	15,540.00	15,540.00				
Salaries				7,102.00	5,446.19	1,655.81

	Income 1938-39	Disbursements 1938-39	Reverted 6-30-39	Income 1939-40	Disbursements 1939-40	Balance Forward 7-1-40
Necessary and Regular Expense				8,438.00	8,438.00	
Special Poultry and Turkey Investigations	11,000.00	11,000.00				
Salaries				6,810.00	6,405.71	404.29
Necessary and Regular Expense				5,690.00	4,589.50	1,100.50
Weather Reports	18,109.50	18,109.50				
Salaries				960.00	960.00	
Necessary and Regular Expense				1,704.00	16,254.68	785.32
Bright Leaf Tobacco-Blue Mold Investigations	5,000.00	5,000.00		5,000.00	3,803.02	1,196.98
Cotton and Peanut Investigations—						
Salaries				5,000.00	1,873.60	3,126.40
Necessary and Regular Expense				1,500.00	1,433.89	66.11
Remodeling old Beef Cattle Barn				6,000.00		6,000.00
Special Pasture Research and Demonstration				20,000.00		20,000.00
Permanent Equipment for Soil Conservation Districts				10,000.00		10,000.00
Research and Demonstration Work on Bright Leaf or Flue Cured Tobacco—Chapter 19322				10,000.00	4,834.84	5,165.16
Branch Experiment Station in Hardee County, Chapter 19489				12,500.00	22.60	12,477.40
Total Experiment Station State Appropriation	$429,781.22	$429,780.72	$ .50	$539,929.00	$417,233.47	$ 122,695.53
AGRICULTURAL EXTENSION SERVICE						
Off-set for Federal Funds—						
Salaries	$ 54,486.05	$ 54,486.05	$	$ 55,800.00	$ 45,918.32	$ 9,881.68
Necessary and Regular Expense	40,224.85	40,220.85	4.00	44,808.00	38,121.24	6,686.76
Special Funds —						
4-H Club Camps	1,003.83	1,003.83		3,000.00	1,996.63	1,003.37
Salaries and Expenses of Extension Agents Chapter 19216				80,400.00		80,400.00
Total Agricultural Extension Service Appropriation	$ 95,714.73	$ 95,710.73	$ 4.00	$184,008.00	$ 86,036.19	$ 97,971.81
Total State Appropriations	$525,495.95	$525,491.45	$ 4.50	$723,937.00	$503,269.66	$220,667.34
FEDERAL FUNDS						
Experiment Station: *						
Hatch	$ 15,000.00	$ 15,000.00	$	$ 15,000.00	$ 15,000.00	$
Adams	15,000.00	15,000.00		15,000.00	15,000.00	
Purnell	60,000.00	60,000.00		60,000.00	60,000.00	
Bankhead-Jones	26,951.43	26,951.43		30,801.64	30,801.64	
Total Experiment Station Federal Funds	$116,951.43	$116,951.43	$	$120,801.64	$120,801.64	$
Agricultural Extension—						
Smith-Lever	$ 63,968.10	$ 63,968.10	$	$ 63,968.10	$ 63,968.10	$
Lever Supplemental	5,179.04	5,179.04				
Capper-Ketchum	26,555.74	26,555.74		26,555.74	26,556.74	
Further Development				8,462.00	8,462.00	
Additional Cooperative	12,400.00	12,400.00				

Bankhead-Jones - - - - - - - - -	111,332.86	111,332.86	.....	120,447.93	120,447.93	.....
Total Agricultural Extension Funds - - -	$219,435.74	$219,435.74	$	$219,433.77	$219,433.77	$.....
Total Federal Funds - - - - - - - -	$336,387.17	$336,387.17	$	$340,235.41	$340,235.41	$ .....
INCIDENTAL INCOME						
Experiment Station - - - - - - - - - -	$ 69,663.58	$ 51,644.73	$	$ 68,568.34	$ 35,511.93	$ 33,056.41
Interest on Federal Extension Funds - - - -	120.43	109.31	.....	11.12	11.12	.....
TOTAL - - - - - - - - - - - - -	$ 69,784.01	$ 51,774.04	$	$ 68,579.46	$ 35,523.05	$ 33,056.41
GRAND TOTAL FUNDS - - - - - - -	$931,667.13	$913,652.66	$ 4.50	$1,132,751.87	$879,028.12	$253,723.75

* Handled through Board of Control Funds.
NOTE: Balances not reverting June 30, 1939, are carried forward as income in 1939-40.

UNIVERSITY OF FLORIDA
REPORT OF INCOME AND DISBURSEMENTS
1938-1940

	Income 1938-39	Disbursements 1938-39	Reverted 6-30-39	Income 1939-40	Disbursements 1939-40	Balance Forward 7-1-40
STATE APPROPRIATIONS						
University of Florida—Salaries	$640,000.00	$639,999.91	$ .09	$745,800.00	$704,807.66	$ 40,992.34
University of Florida— Necessary and Regular Expense	174,827.22	174,823.56	3.66	199,200.00	130,642.24	68,557.76
University of Florida— Extra Boiler for Dormitories				7,500.00	7,500.00	
Chair of Americanism and Southern History	2,508.69	2,499.83	8.86	2,500.00	2,455.34	44.66
Department of Forestry—Chapter 17028	7,500.00	7,499.85	.15	7,500.00	7,499.37	.63
School of Forestry—Chapter 18403	29,788.78	29,164.23		25,624.72	22,512.36	3,112.36
Radio Station, WRUF—Salaries	20,162.50	20,162.00	.50			
Radio Station, WRUF— Necessary and Regular Expense	22,092.75	22,092.75				
J. F. Seagle Building, Section 1— Necessary and Regular Expense	6,908.48	5,322.60	1,585.88			
J. F. Seagle Building, Section 2— Furniture or Equipment	35,713.10	17,949.88		17,763.22		17,763.22
Agricultural College Fund—Chapters 5384 and 19137				7,750.00	7,750.00	
Total	$939,501.52	$919,514.61	$ 1,599.14	$1,013,637.94	$883,166.97	$130,470.97
Permanent Building Funds—Chapter 14573	$ 3,111.15	$ 1,881.56	$	$ 3,168.71	$ 934.48	$ 2,234.23
FEDERAL FUNDS						
Morrill-Nelson Fund	$ 25,000.08	$ 25,000.08	$	$ 25,000.17	$ 25,000.17	$
Bankhead-Jones Fund	18,977.58	18,977.57		18,977.58	18,977.58	
Total	$ 43,977.66	$ 43,977.65	$	$ 43,977.75	$ 43,977.75	$
ENDOWMENT INCOME						
Agricultural College—Interest	$ 7,519.31	$ 6,705.03	$	$ 814.28	$ 814.28	$
American Legion Interest	2,200.00	2,200.00		2,200.00	2,200.00	
Seminary Interest	2,605.31	1,022.21		3,755.40	4,027.72	* 272.32
Total	$ 12,324.62	$ 9,927.24	$	$ 6,769.68	$ 7,042.00	$ * 272.32
INCIDENTAL INCOME						
University	$283,707.44	$252,870.78	$	$270,239.34	$241,776.05	$ 28,463.29
General Extension Division	45,769.71	44,300.76		47,065.87	47,022.77	43.10
Radio Station WRUF	15,013.27	7,412.30		10,222.96	10,222.96	
Total	$344,490.42	$304,583.84	$	$327,528.17	$299,021.78	$ 28,506.39
OTHER INCOME						
Alachua County Appropriation for P. K. Yonge School	$ 10,700.00	$ 10,700.00	$	$ 10,700.00	$ 10,700.00	$

* Debit.

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 of 1938-39 and 1939-1940 and the summer sessions of 1939 and 1940. In compiling this report I have included only the most pertinent information for the periods mentioned and a summary of enrollment and graduation figures for the entire period of the University's operation in Gainesville.

ENROLLMENT

TABLE 1. ENROLLMENT DURING THE BIENNIUM

A. Enrollment by Schools and Colleges for the Regular Sessions, 1938-39 and 1939-40.

	1938-39	1939-40
College of Agriculture	128	155
School of Architecture and Allied Arts	44	51
College of Arts and Sciences	286	300
College of Business Administration	293	255
College of Education	115	99
College of Engineering	199	179
School of Forestry	40	24
General College	2036	2103
Graduate School	193	196
College of Law	159	168
School of Pharmacy	37	43
	3530	3573
Less Duplicates	92	117
NET TOTAL ENROLLMENT	3438	3456

B. Enrollment by Schools and Colleges for the Summer Sessions, 1939 and 1940.

1. SUMMER SESSIONS AT GAINESVILLE

	1939			1940		
	1st Term	2nd Term	Total	1st Term	2nd Term	Total
College of Agriculture	44	28	72	45	24	69
School of Architecture and Allied Arts	1	0	1	4	2	6
College of Arts and Sciences	160	111	271	177	131	308
College of Business Administration	101	94	195	81	81	162
College of Education	855	474	1329	809	439	1248
College of Engineering	17	7	24	22	8	30
School of Forestry	1	1	2	...	...	.
General College	391	308	699	479	341	820
Graduate School	268	221	489	412	200	612
College of Law	72	...	72	71	...	71
School of Pharmacy	3	2	5	8	...	8
	1913	1246	3159	2108	1226	3334
Less Duplicates			885			875
Number of Individuals Enrolled at Gainesville			2274			2459

2. TRADE AND INDUSTRIAL SCHOOL AT DAYTONA BEACH

	1939 1st Term	1939 2nd Term	1939 3rd Term	1939 Total	1940 1st Term	1940 2nd Term	1940 3rd Term	1940 Total
Undergraduates - - - - -	207	154	93	454	178	173	82	433
Graduates - - - - - - -	22	37	19	78	37	49	23	109
	229	191	112	532	215	222	105	542
Less Duplicates - - - -				211				191
Number of Individuals Enrolled at Daytona Beach - - -				321				351

RECAPITULATION	1939	1940
Individuals Registered at Gainesville - - - - - - - - -	2274	2459
Individuals Registered at Daytona Beach - - - - - - - -	321	351
	2595	2810
Less Duplicates - - - - - - - - - - - - - -	4	5
NET TOTAL INDIVIDUALS REGISTERED - - - - - - - -	2591	2805

TABLE II. ENROLLMENT IN THE UNIVERSITY OF FLORIDA FROM 1905 TO 1940

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

*These figures include the enrollment in the demonstration school, except for the Summer Sessions of 1933, 1934, 1935, 1936, 1937, 1938, 1939, and 1940.

TABLE III. DIPLOMAS, CERTIFICATES AND DEGREES CONFERRED SINCE 1905

Year	‡Diplomas & 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	....

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

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

At the beginning of the biennium electrical tabulating machinery was added to the equipment of the University to be used jointly by the Office of the Business Manager and the Office of the Registrar. In many applications to the work of this office we have greatly increased the speed and efficiency of student registration and have been able to eliminate much of the waiting in long lines which are characteristic of most university registration procedures. This equipment has been of great value in preparing student records, statistics and reports.

During the last year of the biennium the Registrar was appointed Dean of the University, serving in both capacities until the end of the period at which time the Assistant Registrar was appointed Registrar.

Respectfully submitted,

H. W. CHANDLER, *Registrar*

July 1, 1940.

REPORT OF THE UNIVERSITY EXAMINER

To the President of the University.

SIR: As University Examiner I wish to make the following report covering the activities of the Board of Examiners for the biennium beginning July 1, 1938, and ending June 30, 1940.

The Board of University Examiners has jurisdiction over admissions to the University and comprehensive examinations. Its work is closely integrated with that of the Registrar's Office, the General College, and the instructional staffs in the comprehensive courses. The activities of the Board will be discussed under the three heads of admission and placement tests, progress tests, and comprehensive examinations.

I. ADMISSION AND PLACEMENT TESTS

The admission policies are fully set forth in the *Bulletin of Information of the General College.* It is felt that these policies are among the soundest and most logical practiced by any state university. It is noteworthy that although high school graduation is required for admission to the General College, no specific subjects are required. The philosophy is that quality is more important than quantity.

Placement Tests.—During this biennium the Board of Examiners has worked in cooperation with the General College in administering a complete program of placement tests to Florida high school senior boys and girls. Through the closely integrated use of the test scoring machine, punched cards, and tabulating machines it has been possible, for the first time, to speed the program so that meaningful results could be returned to the high schools before closing date,* even though the Board undertook, for the first time, the task of scoring and grading all of the tests. The fostering of this program is distinctly a service function to the entire State, as less than one-tenth of those tested actually attend the University. Copies of the results are sent to other colleges in the State for their use. The high schools find the results useful in evaluating the success of their instructional programs and in counseling students regarding their future educational plans.

The speed with which the placement test program is handled makes it possible for the high school authorities to have the results available at the time when the seniors are making their final decisions regarding college attendance. There are evidences that the showings on these tests definitely direct superior students toward college work and discourage inferior students from going to college. For example, in 1938 when the placement tests were given on a much less extensive basis, the University received 14% of its students from the upper ten per cent of the high school seniors, but in 1939, with a much more extensive program, 22% of the freshmen came from the upper ten per cent.

High school authorities are urged to give these tests to all their seniors, both boys and girls, whether or not they plan to attend college. In the spring of 1939, 8,726, or 67% of the seniors in the State were examined. In 1940, the figure rose to 9,583, or 72%. The following basic tests were offered: The Henmon-Nelson Test of Mental Ability; The Cooperative English Test, Second Booklet; and the three parts of the Cooperative General Achievement Test covering Social Studies, Natural Sciences, and Mathematics; supplemented by Cooperative Tests in French, Latin, and Spanish. Because of the many factors involved and the possibility of incorrect interpretations, the Board refrains from making any comparison between schools.

In addition to the advice given high school seniors by the secondary school authorities, the Board of Examiners informs applicants who stand low on their placement tests and in their high school achievement of their meagre possibilities of succeeding in college. They are advised not to take college work without additional study. Personal interviews are granted to these students where they feel that there are special mitigating circumstances in their case. Likewise, persons standing high on their tests and in their high school work are individually urged to continue their study. The details of admission are handled through the Registrar's Office.

II. PROGRESS TESTS

So far as is known, the University is unique among other institutions in its systematic use of progress tests, that is, tests given by the Board of Examiners from time to time throughout the year to inform students, instructors, and parents about how the students are progressing in their various courses.

*In the spring of 1940, the test results were frequently in the hands of the principal within a week after he gave the tests.

These progress tests are very similar to the comprehensive examinations except they are shorter and do not cover as wide a range of subject matter. By means of them it is possible for a student to keep himself continually posted as to what he knows and what he needs to learn regarding his work in the comprehensive courses of the General College. These tests are prepared as an undertaking of the Board of Examiners in cooperation with the instructional staffs of the courses concerned.

Inasmuch as progress tests are not mandatory it is something of an instructional problem to make the students aware of the importance of these tests, particularly since most of them have been taking mandatory tests throughout their previous educational careers. The importance of these tests in relation to success on the final comprehensive examination is shown by the fact that of those who stand in the highest ten percent in progress tests, 80% make grades of "A" or "B" on the final examination, whereas 84% of those who stand in the lowest ten percent make "D's" and failures.

In addition to their informative value on student progress, these tests are also helpful in evaluating the success of instruction. Each test is carefully analyzed to show exactly what questions about the course the students can and cannot answer. All this information is reported promptly to the staffs of the courses concerned so that adjustments can be made without delay. So far as academic guidance within the course is concerned, these progress tests probably supply information without a parallel among college education as to how the individual is mastering his courses. During 1939-40, 68 progress tests were given to 28,152 examinees at intervals varying from about two weeks to one month throughout the school year. In 1938-39, 55 tests were given to 24,854 examinees. In addition, these tests are supplemented by quizzes given by the instructors in a number of courses.

As the duties of the Board of Examiners were originally outlined, no mention was made of progress tests, and it is just within the last three years that the Board has been actively engaged in this phase of the work. At present, this work, undertaken as an added endeavor, overshadows the comprehensive examinations in volume. However, it is felt that this work is one of the most important functions conducted by the Board due to the information that these tests convey to the students, their instructors, and their parents.

III. COMPREHENSIVE EXAMINATIONS

The final assessment of work in the General College is made through the comprehensive examinations which are given at the completion of most of the courses in that College. These examinations are six hours long for year courses and three hours for half-year courses. An attempt is made to cover adequately all the important points stressed in the course throughout its duration. The questions asked are of such calibre and thoroughness that no one should be able to pass them without having mastered the important objectives of the course. The examinations are prepared by the Board of Examiners in cooperation with the instructional staffs in the courses concerned. Most of the actual framing of examination items is done by the instructional staffs due to inadequate man-power of the Board, making it impossible to assign an authority in the field to each course. The examinations are printed, given, and scored by the Board of Examiners. After the

scoring has been done, the staff members are invited to assist in determining the grades to be assigned. These grades are based entirely on the showing made on the examination, although as previously pointed out, there is a close relationship between success on progress tests and success on comprehensives. Thus a uniform and impersonal basis is provided for assigning grades. It is doubtful if a fairer system of grading could be devised.

Comprehensive examinations are offered in May and August in year courses, and in January, May, July and August in half-year courses. In 1938-39 the equivalent of 37 three-hour examinations were given to 11,862 persons. In 1939-40, 33 examinations were given to 10,082 persons. Since the Board of Examiners was founded in 1935 it has issued approximately 35,000 grades, printed 100,000 comprehensive examination booklets, and administered them to 52,000 persons. It is a little difficult to grasp the magnitude of the work done by the Board of Examiners. For example, just the scoring activities for the Board carried out during the months of April and May, 1940, involving the scoring of about 18,000,000 items, would require the work of one full-time employee for five years. This does not include the work involved in preparing, typing, proof-reading, printing, assembling, and giving examinations.

Through its clerical activities in preparing, giving, and scoring both progress tests and comprehensive examinations, the Board of Examiners frees the instructional staff from a large amount of routine work in grading examination papers. This service has in large measure made it possible for the University to offer its large classes in the General College, and thus to offset at least partially the financial inadequacy for classroom instruction.

The comprehensive examinations are thoroughly analyzed, question by question, as are the progress tests, and the results of these investigations are reported to the instructional staffs concerned. This information is useful both in preparing future examinations and in revising instructional methods and objectives. All test questions in comprehensives and progress tests are typed on individual cards which show the difficulty and validity of the question. These cards provide a library of questions for future use as well as a source of information for evaluating the present examinations.

RESEACH AND EVALUATIVE ACTIVITIES

In spite of the tremendous clerical work involved in the placement tests, progress tests, and comprehensive examinations, the Board has undertaken research involving a thorough investigation of the relationship between placement tests, progress tests, and comprehensive examinations. It has analyzed its tests and examinations to show their validity, difficulty, and reliability. It has interpreted its findings and transmitted them to the General College and the various courses involved. As a result, techniques of examining have been revised, the lengths of examinations have been altered, and the difficulties of questions adjusted.

PLANS FOR FUTURE IMPROVEMENTS

The Board of Examiners hopes to plan its future activities to enable it to cooperate more closely with the instructional staffs in the courses involved and with the General College. The Board is in a position to provide a great store of information and interpreted data which should be valuable to both of these groups. It hopes also to enlarge the scope of the high school test-

ing program and to assist where possible in giving guidance to the public school system through the medium of machine-scored objective examinations. For the coming year the Board is making available certain of its facilities to the Sloan Project in Rural Housing.

Respectfully submitted,

JOHN V. MCQUITTY, *University Examiner*

REPORT OF THE DEAN OF THE GRADUATE SCHOOL

To the President of the University.

SIR: Dean J. N. Anderson continued to serve as Dean of the Graduate School from July 1 to September 1, 1938. He retired from active duty on September 1 and was later named Dean Emeritus. T. M. Simpson was appointed Acting Dean, effective September 1, 1938, and continued in that capacity until April 15, 1940, when he was appointed Dean.

The Graduate Office instituted two studies in the fall of 1938. The first was a study of the distribution, activities, and employment status of recipients of higher degrees. The second study had for its purpose to obtain some information on the status of research at the University. Growing out of this study was a recommendation to the President that a Committee on Research be appointed.

In the summer of 1939 the offering of a limited amount of graduate work in the School of Trade and Industrial Education at Daytona Beach was approved. In March 1940, upon the recommendation of the State Supervisor of Trade and Industrial Education, the Graduate Council approved the offering of a sufficient number of additional graduate courses to enable a student in Trade and Industrial Education to complete all of the work for the master's degree at Daytona.

The number of students enrolled has continued to increase. For the academic year 1938-1939 we registered 159 students each semester, with a total, excluding duplicates, of 193 for both semesters. For the year 1939-40 we registered 160 for the first semester and 156, the second, with a total for both semesters, excluding duplicates, of 195. For the 1939 Summer School we enrolled on the campus for the first term, 268; for the second, 222. The total for both terms, excluding duplicates, was 373. At Daytona the School of Trade and Industrial Education held three terms of three weeks each. The number of graduate students enrolled there each term was 22, 27, and 19, respectively, with a total of 46, excluding duplicates. These figures brought up the total number for the summer to 419, excluding duplicates.

The University continued its institutional membership in the Conference of Deans of Southern Graduate Schools. The Dean attended the annual meeting of this conference in the fall of 1938 and again in 1939.

Since the last report no changes have been made in the requirements for higher degrees, and no additional departments were granted the privilege of offering the Doctor of Philosophy degree. Although the Graduate Council has been conservative in this matter, it is expected that from time to time other departments will be added to the list. The total number of master's

degrees conferred during the period of July 1938 to June 30, 1940 is 140. In the same period there have been conferred seven doctor's degrees. There has been a notable increase of degrees offered with a major in education.

On August 29, 1939 the President appointed a Research Council whose function is: "to stimulate and correlate research activity at the University of Florida, including the Agricultural Experiment Station." Three of the seven members of this Council are also members of the Graduate Council. During the academic year 1939-40 the Research Council held regular meetings and because of the direct relation of the Graduate School to research, I believe that the work of the Research Council is exerting, and will continue increasingly to exert, a wholesome and stimulating influence upon the program of the Graduate School.

Gifts for graduate fellowships totalling about $6,000 annually have been received. They are: two fellowships of $1,000 each from the United States Sugar Corporation; one of $1,000 from the General Tung Oil Corporation; one of $1,000 from the Freeport Sulphur Company; one of $700 from the Tennessee Corporation; and one of $1,250 from the American Cyanamid Company. Several other fellowships are in prospect, indicating the interest of commercial organizations in the work of the Graduate School.

Respectfully submitted,

T. M. Simpson, *Dean*
Graduate School

REPORT OF THE DEAN OF THE COLLEGE OF ARTS AND SCIENCES

To the President of the University.

Sir: I have the honor to submit the following report on the College of Arts and Sciences for the biennium ending June 30, 1940, and recommendations for the coming biennium.

The two years since my last report have been characterized by good teaching and effective functioning for the College. During that time new courses, methods and programs have been adopted which have improved the usefulness of the College.

CURRICULAR REVISION

The curricular modifications continue to be systematized by having the Curriculum Committee of the College study critically each new course and any proposed alteration of an old one. Therefore all revisions have received careful analysis before adoption, with the view of supplementing, coordinating and otherwise improving our education program.

Our major curricular problems have been caused by the development of the General College and adjustments necessary to coordinate the courses in our upper division, to strengthen our graduate courses, to meet the needs of summer session students, and to cooperate with those upper divisions of the University which depend on the College for certain instruction. These problems are not new; but experience has been of great assistance in deter-

mining the adoption, revision and dropping of courses in order to promote the purpose and policies of the College.

Typical of the adaptation of several courses to an existing need is the introduction of greater flexibility and diversity into the program offered to students who are looking toward some phase of wild-life conservation as a career.

Course offerings in Bible have been increased and improved.

Valuable additions have been made in courses in agricultural chemistry. Graduate courses in chemistry have been arranged to provide better fundamental study in the various branches of chemistry.

Courses in radio writing, newspaper and magazine illustration and world journalism have been offered for the first time this biennium in response to the changing and growing demands of the profession.

A few minor improvements have been made in the English courses. In each of the foreign languages, a course entitled "Individual Work" has been offered to meet special need.

New courses have been introduced in history with special reference to the needs of students in education.

Four new courses have been offered in mathematics, two especially designed for teachers, one in advanced statistics and one in the theory of probability and sampling.

To round out general science instruction above the General College level, a course in the History of Science was organized during the past year. It is designed to show the impact of scientific discoveries upon human thought and to treat in a non-technical manner the development of astronomy, biology, chemistry and physics principally for the past four hundred years.

The course in general psychology has been reorganized, which affords an advanced critical and constructive consideration of the major topics in the field of general psychology.

In sociology a new course embracing a factual, regional study of the sociological characteristics and resources of the southeastern portion of the United States has been added.

There has been an increase in the laboratory aspect of the work in speech-training for the radio in order that the students may have greater opportunity to practice the theories and techniques presented in the lecture and class discussions.

Courses in physics have been introduced which are designed for students not majoring in the physical sciences who may have interests in physics either from a special standpoint or from a cultural viewpoint.

IMPORTANT PROBLEMS AND PROJECTS

Some problems are common to several departments; such as the correlation of the work with that of other colleges composing the University, the development of a better graduate program, the attainment of more adequate library facilities, the procurement of more time and encouragement for research, and the application of better methods of instruction. In addition to these general problems on which great effort has been made for improvement, the different departments, of course, have certain specific problems and projects.

Satisfactory progress has been made in the Naval Stores research project,

and the addition of a fellowship recently established by a corporation has increased our opportunity for special research in water purification.

In July, 1939, the Board of Control approved the recommendation that the Departments of Ancient Languages, English, French, and Spanish and German be merged to form a Division of Language and Literature. The reasons offered in justification of its establishment were as follows: (1) Greater strength for the subject matter fields concerned through a concentration of interests and efforts; (2) greater efficiency and economy in administration; (3) greater flexibility and adaptability both in the handling of personnel and in the matter of course offerings and program. The accomplishments during the first year clearly indicate that the Division presents a well-rounded program of studies in language and literature, designed to acquaint the students as widely as possible with "the best that has been thought and said in the world." The bringing of eminent writers to the University has been stimulating to the faculty and students. One of our associate professors of English is managing editor of *The Southern Folklore Quarterly.* An assistant professor of Political Science is managing editor of *The Journal of Politics.*

The main problem of the Department of Journalism is a greater use of the laboratory system of working projects and problems in the classroom. It cannot be solved without sufficient faculty, space and equipment.

The Bureau of Vocational Guidance and Mental Hygiene, administered by the Department of Psychology, has increased its volume and quality of service. The projects of the Bureau include the construction of several new attitude tests, vocational tests and vocabulary tests, the further standardization of tests already in use, and several contributions to methods of test construction and validation.

The Department of Speech has continued to promote many extra-curricular projects such as debates, declamation and oratory contests, dramatics, a radio guild and speech clinic.

The Department of Sociology has expanded its program of field trips and the direct study of social agencies at work. The plan is to bring the work of the department into close contact with actual situations and procedures in the fields of social work, social administration, social planning and social research.

NEW FACILITIES

Only a few new facilities have been added during the present biennium although the need has been great. The laboratories at Welaka have been equipped for limnological and field biology work and are serving a very useful purpose. The gift of two aircraft octants and two aircraft compasses, having a total approximate value of $700, has been received from the United States Navy. Some other research and special equipment and office furniture have been acquired for several of the departments.

The critical situation with respect to laboratory space for chemistry has been partly relieved by the acquisition of three rooms in the College of Agriculture Building. Better office space was made available for three professors of chemistry by the removal of chemical engineering to its new quarters in Benton Hall on July 1, 1939, when that department was placed under the administration of the College of Engineering.

FACULTY PERSONNEL

It is recognized that the members of the faculty of the College have not only a teaching responsibility but also a responsibility for keeping abreast of the best developments in their fields of special interest, to collaborate with learned associations, and to advance knowledge through research and creative work. It is gratifying that more than ever before members of the faculty are imbued with this spirit of professional improvement. Some have requested leaves of absence in order to pursue advanced study during the academic year, while others have utilized the summer vacation for doing graduate work. Many of our professors have taken a prominent part in their respective professional organizations—state, regional and national. Many have published research papers and textbooks and made other valuable contributions.

Henry Caldwell, Associate Professor of English, died in September 1938. He had served the College for many years and was universally admired as a teacher and a man.

SCHOOL OF PHARMACY

The report on the School of Pharmacy represents the report of the Director in a slightly condensed form.

A study of the syllabi of the courses in the curriculum has been made by the faculty to eliminate duplications and overlapping of material. Prescriptions and Dispensing was increased from three to four credit hours, and a three-hour laboratory period was added to provide more intensive practical training. Analytical Chemistry has been made a required course. The laboratory work in Organic and Analytical Pharmacy was revised to correlate it with Advanced Drug Analysis. The subject matter in New Remedies was brought up to date.

The School of Pharmacy has been inspected and accredited by the American Council on Pharmaceutical Education.

The demand for graduates of this School has regularly exceeded the supply. Every effort is being made to interest young men and women in pharmacy as a profession.

Space and finances have not permitted the installation of a practice drug store and adequate quarters for experimental animals.

A house telephone system has been installed to give students practice in receiving prescriptions over the telephone. Further addition of new facilities in the way of physical equipment has been seriously curtailed by budgetary limitations.

Owing to resignations, changes have been made in the personnel of the Director of the School, the head professor and the instructor in pharmacognosy and pharmacology. The title of the professor of pharmacy has been changed to professor of pharmaceutical chemistry. They have carried out research projects and their papers have been published in leading professional journals. They have taken a leading part in state and national professional associations, have participated in programs and served on committees. They have traveled for the purpose of inspecting other colleges of pharmacy and manufacturing plants.

RECOMMENDATIONS

I urgently recommend the granting of the budget of the College, including the School of Pharmacy, as submitted. Accompanying the budget will be

found statements in detail supporting it. Additional recommendations not expressed in the budget follow and should be granted as soon as finances will allow.

1. The furnishing of more space and ample facilities for nearly every department in the College, including, especially, new laboratories and classrooms for the Department of Physics, more space for laboratory work in psychology, a vocational guidance reading room, a practice drug store, and a modern city-room with satisfactory equipment for journalism.
2. The appointment of an additional staff member in journalism after having furnished that department with proper facilities for carrying on its work.
3. The advancement of the already splendid cooperation between the editors and publishers of Florida and the Department of Journalism.
4. The appointment of a registered pharmacist to be in charge of dispensing practice when funds become available for the establishment of a practice drug store.
5. The continuance of the hearty cooperation between the School of Pharmacy and the pharmaceutical interests of the State.
6. The allocation of a larger appropriation for books, journals and other literature.
7. The allowance of additional funds for travel for professors attending professional meetings.

Respectfully submitted,

TOWNES R. LEIGH, *Dean*

REPORT OF THE PROVOST FOR AGRICULTURE

To the President of the University.

SIR: I submit the following reports upon the three divisions of the College of Agriculture, namely, teaching division, Agricultural Experiment Station, and the Agricultural Extension Service for the biennium ending June 30, 1940.

Respectfully,

WILMON NEWELL,
Provost for Agriculture

REPORT OF THE DEAN OF THE COLLEGE OF AGRICULTURE

To the President of the University.

SIR: The following report of the Teaching Division of the College of Agriculture for the biennium ending June 30, 1940 is respectfully submitted.

During the biennium particular consideration has been given to reorganizing the curricula in agriculture, bringing them up to date that they may fit present day needs. Likewise the physical equipment of the College of Agriculture has received attention and some much needed improvements and additions have been made. A small, well equipped laboratory for Agricultural Chemistry has been added with the cooperation of the College of Arts and Sciences and the

Soils laboratory has been renovated and improved. Much remains to be done in this same direction to enable the college to meet its obligations to students.

There have been two losses by death in the staff. On March 5 1940, Miss Eleanor G. Shaw, long connected as secretary with the College of Agriculture, known for her efficiency and kindliness by many students, passed away. Dr. L. M. Thurston, Professor of Dairy Manufactures, died February 29, 1940. Though connected with the college for comparatively few years he had won for himself a place high in the esteem of students and faculty. His passing is deeply regretted.

After a preliminary offering in the summer session of 1938, a course in Agricultural Policy was added to the regular curriculum of Agricultural Economics in 1939-40.

A course in Soil Conservation given jointly by the Departments of Agricultural Engineering and Soils has been added to the curriculum. In cooperation with the Agricultural Experiment Station a bulletin on silos has been prepared. The Head of the Department of Agricultural Engineering is assisting the Soil Conservation Service as a member of the State Engineering Advisory Committee.

The Agronomy Department of the College of Agriculture has heretofore offered subject matter covering two general phases of agriculture—(1) Crops, and (2) Soils. During the biennium the soils work has been set up as a separate Department of Soils. The Agronomy Department will concentrate its efforts in the future in advancing field and forage crops, genetics and plant breeding subject matter.

In the latter part of the biennium a greatly needed meats laboratory for class work in slaughtering animals, cutting and processing meat has been constructed for animal industry.

The Florida Chapter of the Block and Bridle Club has held a Little International Livestock Show and Rodeo annually, with an increasing attendance each year. The students gain valuable practical experience in fitting, training, and showing animals.

The Department of Botany has been reorganized to include Plant Pathology. George F. Weber was appointed Professor of Plant Pathology, devoting three-fourths time to teaching. W. B. Tisdale was made head of the department giving one-fourth time to the College. This brings three fields of subject matter, Botany (proper), Bacteriology, and Plant Pathology into one division.

There has been an increase in the number of students in certain courses indicating a growing interest in the various phases of Botany.

The staff of the Department of Entomology has been active during the past biennium. This has been reflected in publications, local professional activities, national entomological society activities, teaching, and research. The student enrollment is the largest in the history of the department. Two new graduate fellowships have been established.

The curriculum in Soils has been revised and designed to serve all departments in the College of Agriculture as well as to train Soil specialists. It is now possible for students in the College of Agriculture to receive fundamental training in the genesis and morphology, classification, identification, and mapping of Florida soils; to study the basic principles underlying proper land use, soil management practices, soil fertility maintenance and economic crop production. In addition, Soils majors receive instruction in advanced soil

fertility, soil chemistry and microbiology and the soil survey. The curriculum also permits of a wide variety of electives in the other technical departments of agriculture and closely allied fields. The enrollment in basic soils was 120 during 1939. This was about double the number enrolled in this course during 1938.

CONSERVATION RESERVE

The facilities of the Conservation Reserve have been available at all times and have been used by the students and faculty of the University of Florida and also by students from other universities.

The School of Forestry has inventoried the timber stand, analyzed the timber growth, made timber cruises, surveyed and staked compartments, made plans for long range operations of good forestry practices and naval stores operations, and given forestry students practical experience in the summer camps held on the Conservation Reserve.

The Department of Biology has equipped a laboratory on the Reserve, established inviolate areas for the study of succession and its effect on animal population and various ecological factors and conducted studies and surveys of the mammal and bob white quail. Studies of cover crops and of the physical and chemical condition of the waters of the area are under way. Studies of soils, and ecological studies of Hemiptera and of the total orthoptera fauna have been undertaken.

The Quail Hatchery aside from its investigational work raised and distributed, mostly in Florida, seven thousand bob white quail.

In addition to the regular maintenance and operation of the fire lanes, truck trails, roads, water systems, fire fighting equipment, dormitories, utility buildings and quail hatchery, the facilities and resources of the Conservation Reserve have been utilized by:

One hundred Florida 4-H Club boys who were given demonstrations in practical conservation and forestry.

The County Home Demonstration Council who used the Mess Hall for State and County Demonstration meetings.

Students from the Blue Ridge School, Welaka-Hendersonville, N. C., have used the athletic field.

SCHOOL OF FORESTRY

The School of Forestry has revised the curricula to require one summer camp of ten weeks instead of the two previous camps of six and four weeks, respectively. The esprit de corps of students and faculty is excellent. All of the alumni have been offered forestry positions. The students maintain the Forest Club and the local honorary society, Tau Alpha Nu, and have continued to publish the annual, *Slash Pine Cache*. Field Day, Forest Fire Protection Week and the National Wildlife Restoration Week are important events in the student's program. Summer Camp is held for six weeks at the University Conservation Reserve at Welaka, and thereafter in West Florida. The WPA Camp Buildings and Recreational Project to the total extent of $25,000 was dedicated on the University Forest in February, 1940. The Southern Shade Tree Conference held its Third Annual Meeting upon the University Campus in February, and reelected a School of Forestry staff member to the office

of Secretary-Treasurer. In January, 1939, when the Austin Cary Memorial Project was dedicated, the Southeastern Section of the Society of American Foresters held its annual meeting upon the University Campus. The research problems of the School referred to in the last report are continuing satisfactorily, and this program has been expanded. Members of the faculty are called upon frequently for public addresses and lectures and for contributions to professional and popular publications. Staff members are also active as officers and committee members of technical, professional and popular forestry organizations and conferences. During the biennium, the Professor of Silviculture who has been added to the staff has since published a recognized Textbook of Applied Silviculture.

Respectfully submitted,

H. HAROLD HUME, *Dean*

REPORT OF THE DIRECTOR OF THE 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, 1940.

The very diverse types of farming of the State necessitate a large number of research projects with a wide range in subject matter. Investigational work on 198 projects during this biennium, has produced gratifying results in many fields. Specific reference to some of these accomplishments is made under the following individual reports of the eight departments of the Main Station, four branch stations and eight field laboratories. A more comprehensive discussion of research findings is given in the Station's annual reports for the years 1939 and 1940.

IMPROVEMENTS AND LAND ADDITIONS

The Board of County Commissioners of Manatee County donated eighty per cent of the purchase price of a 106 acre tract of land at Bradenton. This made possible the establishment there of the Vegetable Crops Laboratory.

During 1939 a donation of 60 acres of land adjacent to the Sub-Tropical Station was made by the Board of County Commissioners of Dade County.

The expanding farm lands of the Main Station have grown away from the antiquated, campus-bordering farm buildings. These have been dismantled and a new farm unit of six modern buildings, centrally located, have been constructed through the cooperation of the Works Progress Administration. Five farm buildings at the North Florida Station were also financed in part by the WPA.

Other construction during the biennium consisted of five miscellaneous farm buildings at the Main Station, a combined insectary and garage at the Pecan Investigations Laboratory and a caretaker's cottage at the Sub-Tropical Station.

EDITORIAL

The biennium has witnessed an increase in knowledge available as a result of research and in publications and articles through which information has

been released. New bulletins printed numbered 24, amounting to 888 pages, with 215,000 copies. Thirty-three new press bulletins were printed, with 22 old ones of which the supply had become exhausted being revised and reprinted.

Five thousand people are notified of the appearance of a new bulletin, and many of them request copies. New bulletins are sent to libraries and technical workers. All other bulletins are sent only on special request, or distributed through county and home agents. Even with quantities going to one person or firm limited to single copies of each bulletin, around 100,000 Station bulletins leave the shelves annually.

Newspapers and farm journals of Florida, the South and the Nation, use generously of Station materials. Station workers appear regularly on radio programs over WRUF and many of their talks are forwarded to other Florida radio stations for broadcasting. An average of 10 or more of these talks each month is sent to Florida farm journals of various classes for publication. Staff members prepare numerous articles which are published in technical and scientific journals.

LIBRARY

Material for 399 volumes was sent to the bindery and 285 new books were added, either as gifts or purchases. This made a total of 684 volumes accessioned for the biennium, bringing the total of bound volumes in the library to 15,348. Catalog cards, 23,319 in number, were added to the catalog. The library received 25,436 documents, including bulletins and continuations. The librarian borrowed 152 books from other libraries and secured, during 1939-1940, 50 microfilms for the use of the research staff.

The resident staff borrowed 4,444 volumes from the library and the librarian circulated 1,005 volumes to the research staff located at branch stations. These figures do not include the thousands of publications used by staff, faculty and graduate students who have direct access to the stacks. There were 1,665 students who used the library and 12,987 pieces of reserve material were read. By an actual person-to-person count in February, 1940, 1,999 persons used the library.

HORTICULTURAL PROTECTION SERVICE

This service covers peninsular Florida. Daily temperature forecasts are prepared during the winter growing season for a network of 82 strategically located stations in agricultural exposures under a system that enables each grower to know what conditions to expect on his own property. Distribution of forecasts and advices is made on daily schedule over 17 commercial radio stations on the peninsula, by press services, private railroad wires, telegraph, and telephone from 12 central and field offices. Temperature forecasts in 1939 were 98 per cent accurate within two degrees and during the abnormally cold 1940 season were 96 per cent accurate within the same range. This service also conducts a temperature survey and for this purpose obtains records from 368 stations in planned locations. A weather reporting service for Florida shippers is maintained during the winter season. Grower education and research in frost protection are other continuing projects. During January 1940 occurred in Florida the most severe freeze since 1895. This record breaking freeze was well covered by warnings and advices issued from the Lakeland headquarters. Depending on location, all Florida growers had at least two

days and most had nine days advance warning of these serious conditions. These warnings gave time to organize some emergency defense measures. Forced harvest before the freeze saved hundreds of cars of choice produce. Valuable shrubbery, seed-beds, and exposed machinery were protected. Savings effected through these warnings were more than $6,000,000 for citrus growers and $6,500,000 for truck growers and general public, as determined by an accurate field survey.

AGRICULTURAL ECONOMICS

WORK COMPLETED DURING THE BIENNIUM

In Station bulletin 339, issued in November, 1939, the organization of the Florida Citrus Exchange System is shown, and the variation in operating efficiency of the local packinghouse units of the Exchange is analyzed.

An economic study of commercial poultry farming in Florida was completed and is now in the press.

Florida Truck Crop Competition bulletin 224 was brought up to date by the issuance of mimeographed supplements for the 1937-38 and the 1938-39 seasons. Likewise, the comparative index numbers of freight rates on citrus fruits from Florida and California were brought up to date, through the cooperation of Dr. Marvin A. Brooker. The original study was reported in Station bulletin 217.

Considerable research material originating in the Experiment Station, was published by the Agricultural Extension Service as Miscellaneous Publications 26 and 28. These are annual summaries of Florida citrus costs and returns studies.

WORK IN PROGRESS

Further work is in progress to analyze the reasons for success or for failure of Florida farmers' cooperative organizations. Data on this type of farmer business organizations are being obtained through the year 1939 for this analysis work.

The study of prices of Florida farm products has been continuous during the biennium. Computations have been made from the farm prices of each of 37 Florida farm products of:

1. Monthly price relatives (Sept. 1924 to Aug. 1930=100).
2. Annual index of purchasing power.
3. Index of seasonal variation.

The construction of monthly group and combined index numbers is now in progress.

Field work was completed covering 389 citrus and vegetable growers and 175 lending agencies which furnishes the background for a study of the adequacy of production credit for this group of producers of farm commodities.

Two new projects have been initiated recently, the one dealing with breeding efficiency of dairy cattle in cooperation with the Department of Animal Industry, the other dealing with land use planning.

AGRONOMY

Crop variety testing, introduction and trial of new grasses, legumes, grains, forage and pasture plants; cultural and fertilizer requirements of field crops;

proper rotation and cropping systems; pasture establishment, management and evaluation; and breeding and selection of improved crops, received major attention.

The fertilizer requirements of corn, cotton, peanuts, tobacco, sugarcane and pasture crops have received attention and a wide variation in their requirement for best production and quality on the several soil types on which grown has been found. In general, corn, cotton and the grasses responded most to nitrogen; peanuts but little to any fertilizer; while tobacco shows marked response in yield and quality to a properly balanced fertilizer; and legumes like clovers are very responsive to lime, phosphate and potash. Trace element needs of crops have been given attention and to date zinc and magnesium seem needed for certain crops.

Breeding and selection have developed outstanding strains of cotton, corn, peanuts, oats, Napier grass, clover and sugarcane, and these are coming into general use.

Crop rotation and cropping system studies clearly indicate the value of proper sequence of crops in order to avoid disease and insect damage and to maintain proper soil fertility and profitable crop yields. All crops have responded to good rotation and cropping system practice.

Pasture investigations have expanded to include a wider variety of soil and climatic conditions and many phases of establishment, management and evaluation are being studied in an effort to find plants which when established and properly managed will give good year-round grazing. Clovers and certain winter growing grasses offer possibilities and are being increasingly used.

ANIMAL INDUSTRY

Research in animal industry included work in dairy husbandry, animal nutrition, animal husbandry, poultry husbandry, veterinary science, and preliminary investigations in dairy products.

The utilization of Napier grass pasture with dairy cows for 2,062 cow-days yielded 57,907 pounds of milk and 2,737 pounds of butterfat. This pasture provided 54 per cent of the nutrients required by the cows for maintenance and milk production.

The average useful life span expressed in years of good proved bulls of four dairy breeds born prior to 1925 were: for 99 Ayrshires, 11.19; 172 Guernseys, 10.45; 277 Holsteins, 10.77; and 197 Jerseys, 11.07.

Dried grapefruit pulp is equal in feeding value to dried beet pulp when used as a source of total digestible nutrients in the dairy ration. Feed consumption, growth, and egg-production records show an apparent lesser value for citrus meal than for yellow corn meal in poultry rations.

Shocked sugarcane was found to be an economical and practical roughage for wintering the beef cattle heard.

An average daily gain of 1.70 pounds was made by grade Hereford steers when grazed on Napier grass. Rotational grazing was practiced.

Clam shell has been found to be a satisfactory source of calcium in feeding for egg production.

Enzootic bronchopneumonia was found to be very prevalent among dairy calves confined in crowded, insanitary, permanent lots. Incidence of the

disease on affected premises has been reduced in proportion to the employment of hygienic methods in rearing calves.

Paralysis, leukemia and certain allied conditions in chickens is induced under field conditions by microorganisms of the paratyphoid and typhoid groups, and under hen-battery environments by adverse atmospheric conditions related to inadequate ventilation.

ENTOMOLOGY

Work in this department covered investigations with root-knot, rodents and insects attacking farm, truck, fruit, nut and ornamental crops.

Selection of varieties resistant to root-knot of lettuce, cowpeas, and of pole beans was continued. Heavy mulches proved very efficient control measures.

Onion thrips were very numerous in onion sets sold in the fall which indicates this to be an important source of thrips that cause outbreaks in the winter and spring. Tartar emetic poison still gives the best control for gladiolus thrips, without deleterious effects on the plants. Studies of the biology and control of thrips and aphids were continued. Many new hosts and several new species have been added to each group.

Considerable progress has been made toward developing satisfactory winter washes for the control of nut and leaf case-bearers on pecans.

The life history of the lubberly locust was worked out, breeding places found and means of control developed.

HOME ECONOMICS

The prevalence of anemia and other nutritional deficiency diseases among rural school children in four counties in Florida and the relation of these diseases to dietary deficiencies have been established. It was demonstrated that most of the general symptoms considered indicative of hookworm were due to iron deficiency anemia. Iron deficient diets result from a lack of knowledge of food values, low incomes and low productivity of certain soils. The data indicate the relation of nutrition to progress in school.

Choline was shown to be an indispensable component of the diet of pullets for the prevention of yolk abortion and fatty livers. The difference in the concentration of fatty acids in the livers of cockerels and pullets suggested some sex variation in the utilization of choline.

In the vitamin field, work has been initiated on carotene and a method has been developed for the chemical determination of vitamin A. The vitamin C content of oranges changed little during maturation, but in the first few weeks of cold storage the vitamin may increase considerably.

Examination of the queen bee food—royal jelly—showed that it is a product resembling evaporated milk in general composition. Among its unusual constituents are a female sex hormone, and a hydroxy decanoic acid. This acid was found to be an excellent fungicide.

HORTICULTURE

The value of horticultural research in testing varieties, plant nutrition, storage and other investigations has been amply demonstrated in commercial adaptation of numerous findings.

Station-tested Katahdin potatoes have now largely replaced other varieties

in the Hastings and LaCrosse areas. Two strains of crisp-heading lettuce have been selected from tests of many for commercial production.

Refrigeration studies have determined the optimum percentage carbon dioxide and oxygen for storage of citrus and avocados. Aluminum foil wrappers, previously tested, are now used in commercial citrus packs. Recent results point to possibilties for pliofilm wrappers for citrus and avocados in both cold storage and room temperature. Specific freezing points were determined for bloom, young fruit and new vegetative growth on citrus.

Tung research has determined manganese deficiency and developed control methods. Growth and fruiting habits of various type trees and the duration of nematodes on roots of seedlings were studied.

Bordeaux-zinc pecan foliage spray improved general tree vigor although no rosetted twigs could be detected. Tests proved the value of Augusta vetch, which is now grown as the principal winter legume on both pecan and tung soils.

Little-leaf of peach in Florida (zinc deficiency) was corrected with zinc sulphate. Commercial peach growers are now using this information.

Testing plant materials and the effects of different minor elements on growth have been important phases of ornamental investigations.

Varietal differences in the effects on nursery stock of HCN and methyl bromide were found by fumigation.

PLANT PATHOLOGY

Progress has been made in the solution of 18 major plant disease problems. The crops involved include citrus, tobacco, beans, celery, eggplant, tomato and certain other vegetable and annual ornamental plants. Information has been obtained on several other plant disease problems of less importance and has been passed on to growers for practical application.

A successful method has been developed for applying paradichlorobenzene to tobacco plant beds for control of downy mildew (blue mold).

A soil treatment method has been developed for preventing damping-off of seedling plants grown in greenhouses.

Seed of the two new Fusarium-resistant tomatoes have been propagated for tests on a commercial basis.

The cause of a new disease, aerial rhizoctonia, of beans has been determined.

Certain new copper fungicides compared with bordeaux gave equal control of leaf blights of celery and increased yields.

One kind of bark disease of several varieties of citrus has been found to be caused by a virus. Another type of disease of Tahiti or Persian lime trees also has been found to be caused by a virus. Both of these diseases are transmitted from diseased trees to healthy ones in the bud wood.

Mushroom root-rot of citrus, other kinds of fruit trees and many ornamental trees and shrubs, has been found to be widely distributed in the State.

Progress has been made in determining the factors which influence the destructiveness of the tip-over disease of eggplant.

Approximately 8,000 specimens of plants, including the lower and higher forms, have been added to the herbarium. Over 300 collections of seeds and 280 specimens of wood also have been added.

SOILS

The rapid expansion of interest in systematic soils work throughout the State has made it necessary for the Department to place greatest emphasis during the biennium on the development of more satisfactory methods of analysis for soils and related materials.

Investigations of the soil and plant phase of the "salt sick" problems in cattle on certain ranges have been continued.

Emphasis has been given to the complete chemical and spectographic analysis of soil and plant samples from carefully planned soil fertility plots as the best means of determining the factors affecting the growth and quality of plants from the standpoint of animal and human nutrition. As a necessary background for this work, complete profile analyses, physical, chemical and biological, are being made of all our important soil types in Florida.

Fertility work has been continued with pasture grasses and clovers, potatoes, celery, citrus, and essentially new work started on bright tobacco, lettuce and a number of other crops.

A study of distribution of micro-organisms in Florida soils and their functional relationships to normal soil processes has been continued. Work also has been carried on with the composting of a number of practical materials and on the decomposition of organic matter incorporated with the soil at different stages of maturity. Greatest emphasis in the soil microbiological work during the biennium has been placed on a study of factors affecting the inoculation of the legumes.

EXPERIMENT BRANCH STATIONS

CITRUS STATION
(Lake Alfred)

Research on the use of zinc, copper, manganese and magnesium was continued and maintenance programs for their use have been developed. A bulletin has been published in which the symptoms of the various deficiencies are illustrated in color. Further research on the role of these elements has shown that a deficiency of any one of them will lower the quality of fruit through reduction in the sugar-acid content of the juice, and also reduce the color of both rind and juice. Deficiencies were also found to predispose trees to cold injury with copper and magnesium deficiencies having a very pronounced effect. The widespread use of copper, zinc, manganese and magnesium in commercial fertilization during the last few years materially aided in reducing damage during the extreme cold of January, 1940.

Research work on soils has shown the extreme importance of controlling the pH of light sandy soils. Sulfur applied in the process of pest control was found to be a considerable factor in lowering the pH of the soil, and it was found desirable to utilize sufficient basic materials to maintain the soil at approximately pH 6.0. A chemical study covering about one hundred citrus grove soils was published as a guide to those interested in soil problems.

Many of the markings on citrus fruits previously supposed to be due to thrips were found to be merely wind scarring, but brown markings that occur at the contact point between fruits were found to be due to thrips, hitherto unreported on citrus.

The facilities of the Station were materially increased when the Florida Citrus Commission financed the purchase of experimental packing house equipment, and work has been started on waxes, color added, coloring room procedure and the effect of fertilizers on the behavior of fruit in the packing house.

EVERGLADES STATION
(Belle Glade)

Diversification of crops and conservation of soil are the two main objectives of the Everglades Experiment Station's program and valuable practical results have continued to evolve from both of these lines of research during the present biennium.

Truck crop experiments relating to disease and insect control, to fertilizer and cultural requirements and to varietal selections are resulting in higher quality produce, in better yields and in a greater variety of crops. Celery and potatoes are now added to the list of important Everglades crops.

Sugarcane breeding by the Station staff has produced varieties that are better adapted for sugar production in the Everglades. Some of these new varieties are excellent for sirup production and are supplanting those formerly in use in North and Central Florida.

The Station herd of Devon cattle is propagating itself in a satisfactory way. There is a pressing demand for the excess bulls, and over 50 of these have been placed on various ranches throughout the state.

Steer feeding trials were continued during the past two years with special emphasis on the use of pastures as the main source of feed. Several cattlemen are beginning to make a practice of fattening steers each winter on Everglades pastures.

Thus it may be seen that diversification of crops has progressed in the Everglades to the extent that there is less of the hazardous one-crop farming.

NORTH FLORIDA STATION
(Quincy)

Experiments with general field crops have established new varieties of corn, oats, sugarcane and winter legumes more productive in yield and higher in quality.

A measure of the value of various swine fattening crops in terms of pounds of pork per acre has been secured over a six year period. Management of the herd for parasite control constitutes part of the program. A study of the birth weight, conformation and rate of gain of purebred and grade Angus cattle is of value to those interested in herd improvement. Fleece weight, quality of wool and body conformation of native, grade and purebred Columbia sheep are given major consideration in a breeding program to improve quality of sheep in Florida. Parasite control is paramount in the management of the flock.

Station-produced varieties of tobacco (for cigar wrappers) resistant to blackshank are now grown exclusively and the Station supplies a large part of the seed. Breeding for resistance to blackshank, root-knot, blue mold and mosaic continues, and three new blackshank resistant varieties have been released for commercial tests. Plant bed studies to aid the farmer in producing an abundance of uniform plants have yielded effective methods of fertilization and blue mold control.

Through the cooperation of the Works Progress Administration an Agronomy building and three tenant houses were constructed, 48 acres of land cleared and much improvement in roadways and drainage ditches was made.

SUB-TROPICAL STATION

(Homestead)

The vegetable research of this Station is limited primarily to the calcareous soils of extreme southern Florida, but the fruit work has expanded to include limited service to the areas up-state where the avocado, papaya and mango industry is spreading.

A caretaker's cottage was erected at the Station, 60 acres of additional rockland was provided by the Dade County Commissioners and a WPA project for topsoiling and planting a lawn throughout the botanical garden was completed.

Corrective measures for avocado and mango mineral deficiencies have been developed. New varieties have been found and tests of their commercial adaptability begun. Fertilizer test results have effected savings to growers. Control measures for black spot and scab of avocado and anthracnose of mango have been worked out with the newer copper fungicides. Cooperative cold storage studies have been conducted with avocados. Mango investigations indicate that the yield of this crop may be increased by proper cross-pollination. An extensive papaya breeding project is under way and an economic method of growing the seedlings for transplanting has been developed. Several of the newer sub-tropical fruit introductions have proved well adapted to Florida conditions.

Potato fertilizer research has effected economy in production costs. Some of the new fungicides have proved more desirable than bordeaux mixture for both tomatoes and potatoes. A method for controlling bacterial soft rot has resulted in many potato packinghouses throughout the Southeastern states installing special equipment for the purpose. Varietal tests of potatoes, tomatoes, corn, lettuce and numerous cover crops have been continued.

The Board of County Commissioners of Dade County has continued to cooperate in supplementing state funds so that experimental work in this County could be increased.

FIELD LABORATORIES

CELERY LABORATORY

(Sanford)

In fertilizer tests, fertilizers with nitrogen from inorganic sources produced largest yields. Applying all phosphoric acid before setting with subsequent applications of nitrogen and potash resulted in considerable injury and stunted growth.

In preliminary trials with 15 different varieties of celery including eight Pascal or green types, Ferry and Morse Supreme Golden was best of golden varieties and Abbott & Cobb Pascal No. 18 was best of the green varieties tested.

Preliminary tests with iceberg lettuce (12 varieties) showed No. 847 and No. 44 most promising. Fertilizer tests indicated that at least 5 per cent nitrogen in mixed fertilizer at rate of 1,000 pounds per acre should be used.

POTATO DISEASE LABORATORY
(Hastings)

Studies have shown that bacterial ring rot of potatoes is not carried over from one season to the next in the soils of the Hastings area, and that all losses from this disease can be prevented by planting seed free of it. A single sulfur-limestone treatment of the soil has been developed that will control brown rot of potatoes. Progress has been made in selecting new strains of potatoes resistant to brown rot, and in determining the adaptability of new disease-resistant varieties. Tests showed fertilizer costs for potatoes were reduced by using urea as a partial source of nitrogen.

VEGETABLE CROPS LABORATORY
(Bradenton)

This laboratory became an integral part of the Experiment Station system in February, 1939. State facilities and personnel were transferred from the old Tomato Disease Laboratory at Palmetto at this time, and the work of that laboratory in developing a Fusarium wilt resistant tomato has been continued.

Studies dealing with varieties, time of planting, and fertilizer programs for Iceberg lettuce have been initiated, as well as selection and breeding work aimed toward the introduction of better varieties. Variety tests of other truck crops are being carried on in cooperation with the United States Department of Agriculture with both standard and new varieties. Nitrogen source and fertilizer ratio studies have been started. Potatoes have been found to respond to manganese sprays on local "sweet" soils.

WATERMELON LABORATORY
(Leesburg)

Acreage planted to the Leesburg wilt-resistant variety has increased and several seed companies now list the variety. Other strains are being multiplied for commercial trials. Progress has been made in studies of other watermelon diseases.

The further testing of grape varieties and root stocks has been carried out.

Much work has been done in maintaining suitable seed stocks of Sea Island cotton and in testing and multiplication of new strains in cooperation with the United States Department of Agriculture.

OTHER FIELD LABORATORIES

Research work has continued at the Strawberry Laboratory, Plant City, the Pecan Laboratory, Monticello and at the Citrus Disease Laboratory, Cocoa.

Respectfully submitted,

WILMON NEWELL
Provost for Agriculture and Director of the Experiment Stations

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REPORT OF THE DIRECTOR OF AGRICULTURAL EXTENSION SERVICE

To the President of the University.

SIR: I respectfully submit the following report of the Agricultural Extension Service of the College of Agriculture for the biennium ending June 30, 1940.

There are three main divisions of the Agricultural Extension Service:

(a) Administrative and supervisory.

(b) Subject matter — which includes specialists giving their full time to specific agricultural enterprises. The duties involved are to select, prepare and distribute information acquired from results of research and observations and assist County and Home Agents in practical application of recommendations that apply to county programs.

(c) County Extension Agents. This group cooperates with rural people, assists them to carry on demonstration work, and aids them to benefit from results of research and teaching. Recourse is had to information gained through experiments conducted by the Florida Experiment Station and the U. S. Department of Agriculture.

Sixty-one counties are cooperating financially in the employment of County Extension Agents, 60 having County Agents and 36 Home Demonstration Agents. Assistant Agents are employed in 4 counties on funds supplied by county boards. Seventeen Negro Extension Agents are employed in counties having substantial numbers of negro farm owners.

Extension Service programs are coordinated with those of Federal agencies, principally the Agricultural Adjustment Administration, Soil Conservation Service, and Bureau of Agricultural Economics. These, in addition to the Agricultural Extension Service, allot funds for cooperative programs.

SOURCES OF REVENUE

The Extension Service is supported by three sources of revenue:

	Amount (For two years)	Percent
U. S. Department of Agriculture	$438,865.46	51.1
State Appropriations	188,400.00	22.0
County Board Appropriations	231,121.74	26.9
Total	$858,387.20	100%

A special allotment of $11,200.00 for the current fiscal year was made from the Bureau of Agricultural Economics for the "Land Use" program. Salaries are paid direct from the Bureau on approval of the Director of Extension.

EDITORIAL AND MAILING DEPARTMENT

This division has supervision of printing and distribution of bulletins and reports, radio programs and publicity materials. Three editors and three stenographers and clerks are employed. Mailing lists are maintained and bulletins and supplies are distributed to County Extension workers and others. Supervised radio programs are presented each week day over WRUF during the Florida Farm Hour. These present an array of news and educational talks on agricultural and home economics subjects, contributed principally by members of the staff of the Extension Service, Experiment Station and Teaching Division.

During the two years the Extension Service printed 105,000 copies of six new bulletins which amounted to 280 pages. It also printed 85,000 copies of four new circulars which total 96 pages, 45,000 copies of two revised circulars amounting to 48 pages, final reports on two years at the Florida National Egg-Laying Test, two annual Farm Outlook Reports, two annual summaries

of the citrus costs and returns study, 24,000 copies of two annual calendars, 10 record books for use by farmers, 4-H club members and home demonstration women, and various mailing slips, milk record sheets, monthly report forms, exhibit cards, programs for short courses, and similar materials needed from time to time.

The Agricultural News Service, a weekly clipsheet, was printed and distributed to all Florida weeklies and many dailies, to farm papers, and to agricultural workers. Special articles by the Editors and other staff members supplemented the service rendered farm journals of Florida and the Nation. Three training schools for home demonstration and 4-H club reporters were conducted, as were six district schools for County and Home Agents interested in presenting radio talks.

The Extension Service observed its silver anniversary during 1939.

PROJECTS

The Extension program operates with 17 projects, five dealing specifically with home economics and 12 with agriculture, horticulture and livestock. However, the projects are inter-related and involve men and women's work, including programs of the Negro Farm and Home Agents. Subject matter is selected and applied to conform with the type of agriculture and the needs of rural people.

4-H CLUB WORK FOR BOYS

Club work supervised by county agents was conducted in 48 counties with an annual enrollment of 4,500 boys, or a total of approximately 9,000 for the two years. Their work is designated by projects, and completions for the two years total approximately 6,000.

The 4-H Short Course is offered each year at the University and attended by boys who have made satisfactory progress in club work. Expense for travel and subsistence is paid from local sources. The Extension Service directs the program.

Three 4-H district camps operate between June 15 and September 1. Each camp has a capacity of approximately 125 members. The program provides for the usual activities of camps for juniors, including recreational, educational and character building features.

The following awards were made to 4-H club boys in 1938 and 1939: Six hundred and twenty-five scholarships to boys' 4-H Short Courses valued at $4,375.00; nine trips to National 4-H Club Congresses at Chicago valued at $900.00; four trips to the National 4-H Club Camps at Washington valued at $340.00; two trips to National Dairy Show at Columbus, Ohio, valued at $225.00; two trips to National Dairy Show at San Francisco valued at $484.00; three trips to the Worlds' Poultry Congress at Cleveland valued at $225.00; 40 scholarships to the College of Agriculture valued at $5,770.00, and an estimated $3,500.00 in cash, livestock and merchandise given at State and county 4-H shows. This is a total of $16,619.00 for 1938 and 1939.

Contributors to encourage 4-H club members are as follows:

Florida Bankers Association
Atlantic Coast Line Railway
State Department of Agriculture
Florida Chain Store Association
Kraft-Phoenix Cheese Corporation
Central Florida Exposition

Florida Fat Stock Show
Model Land Company
Banks of Lake County
Sears Roebuck and Company
United States Sugar Corporation
Service Clubs, County Commissioners, Business men and individuals
Federal Cartridge Company.

CITRUS CULTURE

Citrus programs have been directed toward quality fruit and reducing production costs. Extension Agents have cooperated with growers to maintain fertilizer practices at the most profitable level and these practices have been followed in 1,900 groves. Soil tests were made on 1,223 groves representing 13,248 acres. Soil treatments with manganese, zinc and copper have been followed in 3,350 groves, representing 25,924 acres.

Demonstrations and recommendations regarding frenching, bronze leaf, melanose, scale, and rust mite control have been made.

Cover crop practices were demonstrated in 17,303 groves representing 322,992 acres. There was an increase of 100 per cent in acreage of legume crops in citrus groves.

Lack of sufficient rainfall causes dropping of fruit and produces dead and weakened twigs followed by melanose and stem-end rot. To overcome this, irrigation equipment has been purchased by 168 growers and many changes have been made to increase efficiency of old plants on the recommendations of Extension Agents.

Growers' Institutes were held in all citrus growing counties, giving an opportunity to citrus growers to acquaint themselves with the educational and research work in progress.

ANIMAL AND DAIRY INDUSTRY

Beef cattle work is definitely coordinated with agronomy, farm forestry and other programs and is featured in 4-H clubs.

To improve size and grade of Florida cattle, County Agents and specialists have helped place grade or purebred breeding stock in every county suited to livestock. More than 1,000 beef bulls have been placed with cattle raisers, many brought in from other states. All Florida breeders have readily disposed of all good breeding stock they were able to offer for sale.

Reports indicate that 4,000 good breeding cows were placed, 3,392 high grade heifers were selected for breeders, and 12,000 cull animals were sent to market.

Careful herd management practices and control of the breeding season to secure early winter calves are required to reduce screw worm losses. Mineral mixtures were used to control mineral deficiencies in livestock.

Other practices encouraged include: Control of parasites, especially noticeable in young animals; production of feeder steers to be finished in feed lots; feeding practices to make economical gains; assistance to develop cattle exhibits and marketing centers; and cooperation with the Florida Cattlemen's Association to establish improved livestock practices and better marketing facilities.

HOG PROGRAM

Areas, particularly from Sumter County north and west, that were at one time devoted to vegetables and cotton production are now receiving a great part of their income from the sale of hogs. The program has been built around six points:

1. Improve the grade so that a larger percent will fall into class No. 1.
2. Assist farmers in having their hogs in a marketable condition when prices are highest, usually during the early fall months.
3. Encourage through 4-H club programs production of sufficient improved breeding stock within the State.
4. A program that will improve storage, curing and the meat supply for home use.
5. Encourage marketing centers and establish market sale days.
6. Provide a rotation of feed crops suited to the type of soil.

The program is carried on in cooperation with departments of the College and in cooperation with the Live Stock Sanitary Board.

AGRICULTURAL ADJUSTMENT PROGRAM

This program, underway since 1933, affects every county in Florida. County Agents are the county administrators. Assistants are provided to take over many clerical and other details; they also render some assistance in Extension programs.

The Act provides for farm quotas with cotton, tobacco and peanuts. Conservation and soil improvement features, including adjustment in farm practices, relationship of soil-improving and soil-depleting crops, establishment of permanent pastures, application of soil amendments, and tree plantings on farms are important. Other features include cotton price adjustment payments to cooperating cotton farmers.

AGRONOMY PROGRAM

This program deals primarily with general farming practices, soil improvement crops and pasture grasses and, therefore, is closely correlated with Agricultural Conservation.

Peanuts are produced for market and as a feed for hogs. Their importance justifies special attention. Improvement practices in the program are: (a) Interplanting with corn as an economical farm practice; (b) spacing for increased yields; (c) application of fertilizer and soil correctives as per recommendations based on experimental data; (d) curing and utilization of peanut vine hay.

Upland cotton work included demonstrations with fertilizers and cultivation and a study of varieties to improve yield, quality and staple.

The Sea Island cotton program gave special attention to distribution of pure seed, fertilization, roguing to eliminate cross-pollination, boll weevil control, ginning practices and distributing of cotton bagging, all in cooperation with other federal and state agencies.

Considerable work was done with other crops such as oats, corn, flue-cured tobacco, clovers, cover crops, grasses, and ensilage.

DAIRYING

The Extension dairy program takes into consideration (a) pastures and concentrated feed supply; (b) selection and breeding for higher production; (c) management and sanitation in handling dairy products; (d) feeding practices and relative feeding value of purchased concentrates; (e) herd improvement, including selection and management of calves for herd replacement, thereby avoiding the distribution of unhealthy animals; and (f) 4-H

club programs and dairy herd improvement associations, official testing, dairy records, dairy short courses, breeding cattle sales, and special emphasis in cooperation with Home Demonstration Agents to encourage greater use of dairy products in farm homes.

POULTRY PROGRAM

The program has been developed around the following:

(a) Baby chick and pullet management
(b) Management and feeds for the laying flock
(c) Record keeping, marketing and quality products
(d) Diseases and parasites
(e) Educational programs for 4-H boys and girls.

The Florida National Egg-Laying Test at Chipley has capacity for 100 pens. These have been filled with birds from 15 Florida counties and from 23 states, Canada and Cuba. The test is now in its 14th year of operation. The revenue from sales and entry fees pays over 50 per cent of the operating cost.

Florida contributed to the World's Poultry Congress held in Cleveland, Ohio, in 1939. A committee of which N. R. Mehrhof, Extension Poultryman, was chairman, made creditable displays and provided a Florida program with 4-H club members and Future Farmer members participating.

AGRICULTURAL ECONOMICS

This program has three main divisions — Farm Management, Marketing, and County Planning.

Citrus grove management studies carried out cooperatively with County Agents and growers check results of practices in groves and furnish information on production costs, values, and actual profits or losses. Record books are designed to record needed information for growers. At the end of the year these records are tabulated and the information is made available to individual growers, County Agents, Federal credit agencies, and teachers. Results are presented at growers' meetings and published in bulletin form for distribution.

Potato studies were made in a similar way in Dade County. Records have been obtained on three-fourths of the entire acreage. Packing houses, shipping records, and marketing agencies' records are made available as a part of this economic information.

Dairy Records: A comprehensive study was made in 16 dairies in the Jacksonville area to provide dairymen with a system of record keeping to record costs of feed, labor, marketing and a complete inventory of a year's dairy business, including farming operations as a part of the dairy enterprise.

Farm Management studies were made in Jefferson County in cooperation with the Soil Conservation Service to be used as a basis for setting up future farm plans and educational work in connection with a soil conservation district program.

A preliminary survey was made covering celery in Palm Beach County to secure information on growing practices, marketing practices, sales and returns to growers. Celery growing on Everglades muck land is relatively a new practice.

Outlook information is reported each year as a result of economic and

production studies made from accumulated data from State and Federal sources. It is used as a guide and basis for recommendations to agricultural producers.

MARKETING

Florida has in excess of 30,000 growers of perishable products for sale, also 300 shipping organizations and 400 packing houses. Citrus and vegetables are the main crops involved.

Organization work with cooperatives has been planned so that the Experiment Station, Farm Credit Administration, Agricultural Adjustment Administration, State Commodity cooperative associations and Florida Citrus Commission make contributions and coordinate their efforts to encourage orderly marketing and more equitable returns.

An investigation of auction markets was made at the request of the Florida Citrus Commission. The Farm Credit Administration and the Federal Trade Commission made their records available for this study.

In cooperation with the Florida Canners' Association information was collected for their use, providing relative cost figures for fruits, labor, processing, containers, equipment and sales.

Marketing studies were made covering celery, potatoes, beans and tomatoes.

A study of hog prices in relation to grade, size and marketing seasons is underway.

FARM FORESTRY

Farm forestry Extension program began in a definite way in August of 1938. The program has dealt with fire protection, economical cutting and utilizing timber as a part of the farm operation, planting, 4-H forestry clubs, tree planting as a conservation measure and getting a return from now unused lands.

Relative values of timber on the farmer's woodland and relative returns from sales of pulpwood, gum for naval stores, lumber, fuel, etc., have been pointed out.

Cooperation was rendered Federal and State agencies to conserve timber resources in soil conservation, and to assist County Agents and farmers to plan for increased farm income from farm woodland.

WORK WITH NEGRO FARMERS

Counties with the largest number of Negro farm owners, principally in the general farming areas, have been selected as most suitable for Extension work with Negro farmers. The main objectives are to direct farm operations for subsistence purposes, largely a feed and food program that will also provide for conservation of lands and timber, and cash returns from sales of livestock, vegetables, poultry, peanuts, cotton, tobacco and home enterprises.

Nine counties have Negro men agents and 8 counties have Negro women agents. Funds come from Federal and State appropriations. Only two counties contribute toward salaries and travel.

4-H club programs and short courses are supervised and conducted in the same manner as all other 4-H club work, with modifications to fit conditions.

LAND-USE AND COUNTY PLANNING

A general program known as "Land-Use and County Planning" set up by the Department of Agriculture, is underway. Its purpose is to unify procedures that may apply to all agricultural agencies, both Federal and State, correlating

them through the Land Grant College facilities and the Extension Service. The Director of Extension is the administrative head.

A State Committee consisting of heads of state and federal agencies, and 10 representative farmers and farm women has been appointed to formulate general procedure. The supervisory committee consists of three persons representing the Extension Service, the Experiment Station and the Bureau of Agricultural Economics.

A project leader selected from the staff of the Economics Section of the Extension Service has been placed in charge of the project. The work is carried out under his general direction with the approval of the Director of Extension.

Surveys are made in counties and headed by the Extension County Agents. To date these programs have been extended into 11 counties.

Counties in which Land-Use Planning work is in progress:

Escambia, Jefferson, Madison, Lafayette, Columbia, Pinellas, Seminole, Walton, St. Johns, Palm Beach and Hillsboro.

Number reports issued —5
Number reports written—9
Number of State conferences—3 with farmer members
2 previous to that
Number of reports accepted by State Committee —5
Number of reports accepted by County Committee—7

HOME DEMONSTRATION WORK

Home demonstration work serves all members of the farm family. Town and village families also use the home demonstration office extensively because of the help they secure on consumer buying problems, use of Florida-produced foods, and general community activities.

The development of trained leadership through achievement of worthwhile results has been a primary objective. Farm women and girls determined the programs of work needed in their homes and communities. Ten thousand, six hundred and sixty-four girls and 7,413 women were enrolled for individual demonstrations at the close of 1939, 36,317 girls and women for the biennium. Experience gained through work in organized clubs supplied good training for leadership. Three hundred and eighteen clubs for women and 503 clubs for 4-H girls met regularly each month. Agents held 235 meetings to train volunteer leaders in specific subjects. These leaders in turn conducted nearly 5,000 community meetings to instruct more than 63,000 other people, supplying useful information to many more people than the agent could reach unaided and building a feeling of responsibility among rural people for community service. County and state councils composed of leaders designated by each community club help the agents guide county and state-wide programs. Thirty-one counties now have councils for girls' work and 32 have councils for women, an increase of four in each case. The two State Councils each held two annual meetings to develop plans for state-wide work. The State Council for women financed two college scholarships for 4-H girls. Three hundred and fifty-seven former 4-H girls served as volunteer leaders for 4-H clubs in their counties. Farm women are members of State and county land-use planning committees. As a part of their program to meet community needs, home demonstration women and girls built or established 83 community club rooms or buildings;

held 759 community programs; established 68 libraries; improved 401 school grounds, and aided 301 schools in the improvement of school lunches.

More than 20,000 rural girls between 10 and 20 years of age were enrolled in 4-H clubs; each girl conducted at least two result demonstrations throughout the entire year to improve her home and to learn how to carry on home duties efficiently. Florida girls won national honors in 4-H club work, first in food preparation and fourth in poultry. Ten girls attended the National Club Congress, four the National 4-H Club Camp. A 4-H girl won first place in the State Poultry Judging Contest competing with 4-H boys and girls and was awarded a trip to the World's Poultry Congress. Two teams of 4-H girls won both first and second places in the state poultry contest this year; as first award three girls will receive trips to the National 4-H Club Congress to represent Florida. Two annual State Short Courses gave training to 1,120 outstanding 4-H girls and local leaders. The College 4-H Club at Florida State College for Women enrolled 150 members, 40 freshmen in 1939, indicating the increasing number of 4-H girls attending college. Nearly all earned most of their college expenses.

Public spirited citizens showed their approval of 4-H club work for girls by offering awards for work well done; 1,018 scholarships to Short Course were valued at $15,270.00; 10 scholarship trips to the National 4-H Club Congress at Chicago valued at $1,250.00; four scholarship trips to the National 4-H Camp valued at $400.00; one trip to the World's Poultry Congress valued at $125.00; college scholarship funds valued at $1,000.00; County camps and short courses, valued at $7,240.00; NYA scholarships to 4-H girls in College had a cash value of $3,936.00. The total cash value of the awards is $29,221.00 for 1938 and 1939.

County reports show that 37 county home demonstration agents and three assistant agents worked directly with 19,553 Florida farm families and 12,039 non-farm families. At least one girl or woman in each family conducted a demonstration throughout the year to meet a need of her own family, following directions of the home agent. Many people not enrolled for organized activities were helped. Agents held more than 8,000 public meetings to give seasonal instruction on farm and home enterprises to the 287,697 persons. They answered 43,000 telephone calls, wrote 64,800 letters and 5,650 newspaper articles and made 300 radio talks. They directed 362 county camps and short courses attended by 55,631 people. The eight State Staff members helped with community meetings having an attendance of 60,000.

Valuable assistance has been given and received from many other organizations. Among them are the State Board of Health, Farm Security Administration, Agricultural Adjustment Administration, Works Progress Administration, business organizations, civic and social clubs. Especially satisfactory relationships are maintained with other educational agencies.

PROJECTS

Hundreds of farm women and girls followed definite programs in planning, providing, conserving and using the family supply of food to have it in amount and variety adequate to meet nutritional needs. Production of crops interested both men and women.

The all-year garden proved its economic and health value to 17,069 girls and women, while 13,583 had fall and spring gardens. Five thousand, five hundred

and sixty-one fruit trees and bushes were planted as a part of the plan to supply fresh fruit each day. The AAA garden project stimulated interest in home gardens among farmers.

The farm poultry flock for food for the family and also to add to the cash income was cared for by 5,858 women and girls. One hundred sixty-one thousand, six hundred and forty-six purebred birds were purchased for flock improvement. An egg quality program was studied in nearly all home demonstration clubs. Poultry products to the value of $146,550.99 were marketed.

The value of the family cow and the best methods to care for her and the use of dairy products in the home were the basis of dairy work with home demonstration women and girls. One thousand, two hundred and twenty-seven home cows were secured by demonstrators.

Four intensive short courses in poultry, gardening, and home dairying were given to all home demonstration agents by staff members of the College of Agriculture and Experiment Station.

Interest in bees on the farm increased greatly. The use of honey in cookery was taught in all counties.

The canning program was developed along with the garden, poultry and meat supply projects. Canning of a variety of fruits, vegetables and meats to supply the fresh produce was stressed. More than six and one-half million pints of Florida-grown food were canned in farm homes. Community canning centers with proper canning equipment were established in nearly all counties, usually through the help of Boards of County Commissioners and county councils of home demonstration work.

The nutrition program emphasized the need for farm people to know the principles of normal food requirements of the body, and to understand the influence of proper nutrition upon normal development and optimum health and growth. Proper cooking methods, use of Florida foods, planning well-cooked meals, attractive serving of foods, all were included in the nutrition program. Health improvement work was conducted with 11,799 girls. A Florida 4-H girl won first honors nationally in the food preparation work among 4-H girls.

How to clothe the family properly for health and economy in attractive, desirable clothes suited to Florida conditions was the basis of this program in which 22,065 women and girls enrolled to develop skill in home sewing. Standards for buying ready-to-wear garments and textiles for the home were taught. In this program as well as in home sewing, local merchants helped generously. Low prices for cotton and lowered cotton consumption as well as the special suitability of cotton for use in Florida determined the emphasis on use of cotton. Mattress making demonstrations using surplus cotton were started in 24 counties.

Home improvement work was planned to encourage farm people to consider desirable improvements which might be made, either with or without cash expenditures. Women and girls planned how to get needed cash by increasing the poultry flock or developing some other profitable home industry using resources at hand. Improved health was secured by many families by improved management of home duties. Close relation between farm and home management plans was encouraged. More than 781 homes were built or remodeled and 823 screened. Home sanitation and health was taught through kitchen

improvement contests, and campaigns for water and lights in the home. Rural electrification was aided in nearly all counties.

Fifty-one roadside markets or sales booths were operated, although most sales were made directly to the consumer. The State Bureau of Markets cooperated with the home demonstration agents in this program. Farm women and girls who gave detailed reports of their sales of home-manufactured articles from materials found on the farm or in the community stated the total cash received for these articles was $343,989.00. Garden and orchard produce, eggs and dressed poultry, home dairy products, and craft articles were the sources of this income, but ingenuity and originality of the women and girls in sales methods played a big part in marketing their wares.

All phases of the home demonstration program emphasized the value of good health and ways to secure it. An adequate supply of food, proper sanitation about home and farm, healthful clothing, correct posture, everyday good housekeeping, and the right mental attitude toward family and community problems, all improved health conditions for rural people.

Negro work is supervised by the State Home Demonstration Agent through a Negro district agent working with eight local agents. An adequate supply of food produced at home and the need for sanitation and hygiene in the homes were stressed in all programs. Seven thousand, nine hundred and thirty-two Negro girls and women were enrolled during the biennium.

Respectfully submitted,

WILMON NEWELL,
Provost for Agriculture and Director of Agricultural Extension Service

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REPORT OF THE DEAN OF THE COLLEGE OF BUSINESS ADMINISTRATION

To the President of the University.

SIR: I beg to submit herewith the following report on the activities of the College of Business Administration for the biennium ending June 30, 1940.

The College offers three curriculums: first, the curriculum in business administration proper; second, the curriculum in combination with law; and third, the curriculum in public administration. Since the first two curriculums which lead to the bachelor of science in business administration were completely revised and adjusted to the General College in 1936, no changes in them have been necessary during the biennium. The curriculum in public administration was added in 1939-40. It leads to a bachelor of science in public administration. It is designed to prepare students for the government service. While it has not been offered long enough to draw any conclusions concerning its effectiveness, it provides for a training program organized to meet one of the greatest needs of the present.

Two other changes in the educational policy of the College of Business Administration have been made during the biennium. First, we revised our requirements for graduation with high honors. We have specified that students must attain a scholastic average in all academic courses of 3.4 before they are eligible as candidates for high honors and that they must secure the recom-

mendation of a faculty committee. This committee determines by oral or written examination or by any other means deemed proper by the committee whether the student is worthy of graduation with high honors. Their report is then presented to the faculty for final action. Second, we have completely revised our array of graduate courses. We feel that our undergraduate program is in good shape. We are now devoting a great deal of time and thought to our graduate program. We are perfecting our graduate courses and strengthening our graduate offerings. We feel that the times demand increased training in economics and business on the graduate level.

The College of Business Administration in 1938-39 enrolled 293 students and graduated 123. In 1939-40 it enrolled 255 students and graduated 115. The decrease in enrollment as well as in number of graduates is due I think to the raising of our standards of admission. Students may not enter this college now unless they have maintained a "C" average in the General College and a "C" average in the three courses in economics and business which are prerequisite to upper division study. As a result of rigid adherence to these standards the number of students enrolled has dropped but the quality of these students has been greatly improved.

Several faculty members of the College of Business Administration have been unusually active in consulting and other kinds of professional work during the past biennium. James E. Chace has served as supervisor of merit examinations for the United States Employment Service and for the Florida Industrial Commission. A. S. Campbell has served as a consultant with the United States Maritime Commission and is during the present summer employed as an economist with the Tennessee Valley Authority. R. B. Eutsler acted as director of an extensive tourist survey of Florida which was conducted by WPA. T. C. Bigham functioned as adviser to or as expert witness for the Florida Railroad Commission, the office of the State Comptroller, the Prelegislative Tax Committee of the 1938 Florida Legislature, and the Civil Aeronautics Authority in Washington. He was also president of the Southern Economic Association in 1938-39. R. S. Atwood has continued to administer the Institute of Inter-American Affairs.

Several faculty members have written articles, bulletins and books during the biennium. M. D. Anderson's *Dynamic Theory of Wealth Distribution;* Walter J. Matherly's *Business Education in the Changing South;* R. B. Eutsler's (together G. Lloyd Wilson and James M. Herring of the University of Pennsylvania) *Public Utility Regulation;* and John B. McFerrin's *Caldwell and Company: A Southern Financial Empire* have all been published during the past two years. These as well as other members of the faculty have written numerous articles for economic and other journals. Three or four faculty members have continued to work toward advanced degrees.

The faculty personnel of the College of Business Administration has remained largely unchanged during the past two years. Earl Powers was added to the staff as an instructor in accounting. Nancy Whitaker resigned as secretary and was replaced by Catheryn Smith. In April of the present year Ben Cogburn, Assistant Professor of Accounting, died. His place has not yet been filled.

The needs of the College of Business Administration are of two kinds: First, needs pertaining to faculty and second, needs pertaining to quarters. The amount budgeted for the College of Business Administration in 1940-41 and

approved by the legislature provided for an additional assistant professor of economics and an additional instructor in accounting. But in spite of the fact that these additions were badly needed the amount budgeted therefor never became available and the positions were left unfilled. I wish to recommend that the positions be retained and that funds necessary to fill them be provided. In addition, I wish to recommend that one part-time instructor be advanced to a full-time assistant professor and that provisions be made for the employment of a new assistant professor of public administration. The need for this position is urgent due to the establishment of our training program in public administration. I wish also to recommend that funds be made available for at least five additional graduate assistants. These assistants are greatly needed to assist with teaching, to lighten heavy loads and to develop graduate study and research in economics, business and government.

The general level of salaries in the College of Business Administration should be raised. Faculty members as a whole receive about the same salaries as those they received in the early nineteen thirties. The level of salaries, I feel, must be raised. There are three reasons why I take this position: First, because the application of the Federal Income Tax to faculty members during the past year virtually represented a decrease in salaries; second, because I anticipate higher costs of living during the next two years due to the speeding up of national defense; and third, because of achievements of faculty members in their particular fields. To meet the requirements of the immediate future as well as to award merit where merit is due promotions in rank and substantial salary increases all along the line are necessary.

The operating expense of the College of Business Administration should be increased in three respects: First, to provide for travel expense of a limited number of visiting lecturers; second, to take care of increased demands for research activities in the Bureau of Economic and Business Research; and third, to inaugurate certain projects pertaining to government research. It is necessary to the successful working of this college that we have a small amount of money to bring at stated intervals distinguished economists and government experts to the University. Likewise it is necessary that we engage in an organized program of research in economics and business and in government. In the critical times which are ahead research of this kind is imperative. The citizens of the State engaged in business as well as officers of state and local government constantly demand of us that we supply them with facts, figures and interpretations which are essential to their activities. It is necessary that we provide definite research programs to meet these demands.

I wish to renew the recommendaiton which I have made in several former biennial reports, concerning our needs for new quarters. Even though the College of Business Administration was established fourteen years ago, it has never had a building of its own. Classrooms and offices are scattered in four university buildings. Widely separated quarters interfere greatly with our efficiency both in instruction and in administration. We should have a building especially adapted to our needs where we can concentrate all our activities. A building of our own would not only meet the urgent expanding demands of the College of Business Administration, but it would also relieve the pressure upon other buildings.

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 on the College of Engineering and the Engineering Experiment Station for the period ending June 30, 1940.

During the past biennium certain items deserve particular mention: (1) Our graduating classes were larger than ever before. (2) The demand for our graduates in practically all departments continually increases. (3) Noteworthy recognition has been given to many of our recent graduates by the Government, by industry, and by the various professional societies. (4) More research is being done by our faculty and students, as is evidenced by an increased quantity and improved quality of published material. This has been true even though teaching loads have been heavy and many extra but necessary tasks have been performed by the members of the faculty. (5) Important revisions and additions to curricula have been made, particularly in aeronautics, air conditioning, chemical engineering, electronics, and civil engineering. (6) Close cooperation with industry and governmental agencies has been of aid in conducting research problems and in the placement of our graduates. (7) Noteworthy recognition has been given several of our faculty members by various professional societies. (8) The transfer of the Department of Chemical Engineering to the College of Engineering has resulted in improving the quality and efficiency of the work of this department. (9) There has been a definite increased interest by the profession and by the industries of the state in the work of the college. (10) The increase in drafting room and laboratory space and equipment has somewhat overcome overcrowded conditions and has resulted in more efficient and improved instruction. It will also make possible carrying out of additional research work when the staff can be increased. (11) The college has been commended by the CAA for its assistance in the plans for national defense. (12) Many engineering services have been performed by members of the faculty for the University and for other state institutions.

In my last report I called attention to several of our policies. These policies have been continued and in several instances have received commendation not only from industrial leaders and educators in this country, but also from abroad.

Mere technological training is insufficient for a worthwhile professional career. It must be augmented by liberal education in other fields. Through close cooperation with the General College and by guidance in assisting the student in choosing electives real progress has been made along these lines. At the present time engineering students of the University of Florida secure a reasonable general education together with the necessary technical subject matter which should enable them to enter their chosen profession with credit to themselves.

Members of the staff of the Engineering College attempt insofar as possible to advise university freshmen who indicate a desire for entrance into the engineering profession. Thru this guidance plan adjustments are made in the regular curricula so that the student can efficiently plan his course.

It is interesting to note that because of the two year terminal policy which is now in effect it has been possible to raise the standards required of students entering the Engineering College. The result of raising these standards

has been that the total number of students now in the junior and senior classes in engineering has been reduced. On the other hand, the number of graduates is continually increasing. It, therefore, appears that we have been able to discourage students who are unfit for engineering in a much better way than has been the case in the past and yet at the same time we have not had any curtailment in the number of graduates as is indicated by the graduating class in engineering for 1939-40 being the largest in the history of the University.

The Engineering College has worked consistently with employers of our graduates and it is interesting to note that insofar as we are able to tell none of our alumni are at present unemployed.

The College of Engineering has for many years cooperated with other divisions of the University and has been of assistance to the other institutions operating under the Board of Control in furnishing technical information pertaining to various matters. In this direction the services of Professors J. W. Wilson of the Electrical Engineering Department and of N. C. Ebaugh of the Mechanical Engineering Department are particularly outstanding. Due to their work a large amount of money has been saved in the operation of the electrical maintenance system and in the work which has been done in the operation of the heating plant of the University. Dr. R. A. Morgan has been of value to the Dairy Products Laboratory in connection with the operation of this equipment and its researches for dairy industries.

During the past year the college cooperated with the Civil Aeronautics Authority in making available a course in civilian flight instruction. This work has been carried on under the direction of the Dean. The ground instruction was very efficiently handled by Prof. R. A. Thompson and the flight instruction thru Mr. Carl E. Stengel, the operator of the local airport. The quality of the instruction is best indicated by the fact that our entire quota of thirty men successfully passed the requirements for securing private licenses. We are now continuing this cooperation with the governmental agencies and forty-five men are enrolled for a similar course this summer.

The addition of the new Hydraulic Laboratory has been of real value to the Engineering College as a whole and to the Civil Engineering Department in particular. During the past few years many requests have been received for courses in sanitary engineering and in other courses in the general field of public health. The sanitary laboratory is located in this building and will be of real value in this regard.

The Electronics Laboratory in the Seagle Building has been materially improved thru the efforts of Prof. S. P. Sashoff. Much new equipment has been added to this laboratory primarily thru gifts and thru the reconstruction of existing equipment. In the Mechanical Engineering Laboratory the wind tunnel is being completed. The Fuels Laboratory which has recently been installed has proved a very important addition. The Metallography Laboratory, due to the excellent work of Prof. S. K. Eshleman, now is an asset to the college. Additional equipment for experimental work in photo-elasticity should be added. Due to the remodeling of the Central Heating Plant space was secured for the Steam Laboratory so that now for the first time an ample quantity of steam is available for operating laboratory equipment of the Mechanical Engineering Department.

PERSONNEL CHANGES

Professor A. J. Strong, a member of our faculty for twenty-six years, died on Oct. 26, 1939. Instructor E. S. Frash was appointed to the vacancy created.

Assistant Professor W. L. Sawyer was promoted to fill the vacancy caused by the resignation of Associate Professor T. M. Lowe who resignation became effective April 1, 1939 when he accepted the position of the Head of the Civil Engineering Department of the Alabama Polytechnic Institute.

Assistant Professor H. J. Miles formerly of the South Dakota State College was appointed to the position held by Assistant Professor Sawyer.

Dr. R. A. Morgen formerly of the University of California with considerable experience as a consulting engineer was appointed Professor of Chemical Engineering upon the resignation of Dr. J. W. Mason.

ENGINEERING EXPERIMENT STATION

There can be no real university without research. In recent years the College of Engineering has taken cognizance of this fact and in the building of its new laboratories every effort has been made that equipment secured is not only valuable for student instruction but also for experimental work as well.

Research may be idealistic or practical, theoretical or utilitarian, of probable future value or of immediate usefulness. Technological research is practical, utilitarian, and can be put to immediate use.

Florida's future rests in a great measure on the development of new industries and in the expansion of our present ones. It is a regrettable fact that much of our laboratory equipment is idle for a large percentage of time. If trained scientists used these facilities valuable discoveries might result which would bring to our state additional wealth and better living. The work of the station has been approved and resolutions recommending additional financial support have been passed by many organizations, including the following: Florida State Chamber of Commerce; American Legion, Dept. of Florida; Florida State Planning Board; Florida Branches of the various professional engineering societies; Farm Chemurgic Council; Chemical Foundation; American Chemical Society; Gainesville Rotary Club; Florida Engineering Society; Engineering Professions Club of Jacksonville; Sanford Junior Chamber of Commerce; Central Florida Engineers and Surveyors Association; Seminole County Chamber of Commerce; Florida Association of Real Estate Boards; Florida Section, American Water Works Association; and the Southeastern Metermen's Association.

Some research has been done and much more is under contemplation. During the past biennium the following Engineering Experiment Station bulletins were released: Bulletin # 5, "Climatic Data for the Design and Operation of Air Conditioning Systems in Florida," and Bulletin #6, "On Static Emanating from Six Tropical Storms and Its Use in Locating the Position of the Disturbance."

Many problems now demanding consideration which are of great importance to our state come under three main groups: (1) The discovery, development, utilization, and conservation of our natural resources with the consequent development of new industries and assistance to existing ones. The station would act as the research laboratory for certain small industries for

conducting research and development work which those industries, because of lack of facilities, are unable to do. (2) The study of problems affecting the health of the people of the state with special reference to water supplies, sewage and garbage disposal, drainage, sanitation, and any other matters of an engineering nature affecting the public health. (3) The protection of life and property from natural phenomena, including among other things a reclamation of waste land, protection of our beaches and shores from erosion and continuation of the work on location of tropical storms. Part of this work would include the adequate mapping of the state in cooperation with other state and governmental agencies. Detailed information pertaining to the station is contained in an article "An Industrial and Engineering Experiment Station Primer."

RECOMMENDATIONS

1. An outstanding need of the State of Florida and the College of Engineering in particular is an adequate Engineering Experiment Station with its accompanying research workers, equipment and laboratories. The sum of $50,000 per year expended primarily for the employment of expert research workers in engineering should be made available. Such an investment would return dividends to every citizen of our state.

2. Many members of the staff are underpaid and many are seriously overloaded. Salaries should be increased and additional staff should be added.

Respectfully submitted,

JOSEPH WEIL, *Dean.*

REPORT OF THE DEAN OF THE COLLEGE OF LAW

To the President of the University.

SIR: The work of the College of Law shows more maturity. Doubtless the value of our higher entrance requirements, effective in the fall of 1934, is asserting itself. It is significant that in the past six years an equal number of four year pre-legal and three year pre-legal students were dropped for failure to pass fifty per cent of the hours of work taken, whereas almost double that number of two year pre-legal students were dropped. Another reason for good results is carefully planned courses observing a proper balance between legal mechanics and legal knowledge. From the above factors results a better fusion of theoretical and practical social understanding which conditions today make desirable.

FACULTY

The work of the faculty never has been harder. Participation by it in two state legal institutes, assistance in circuit institutes, more addresses and attendance upon other legal meetings, and closer cooperation with the State Board of Law Examiners characterize the last biennium. The faculty has been represented at or on the Merit Committee of the State Welfare Board, the Stetson University Law Day, the Short Course for Farm Security Administration Supervisors, the Institute of Federal Procedure at Atlanta, the annual meetings of the Florida Legal Aid Association, the meetings of the State Bar

Association, the institutes of the First and Eighth Judicial Circuits and of Duval, Dade, and Orange Counties, and the meetings of the Association of American Law Schools at Chicago.

Professors Crandall, Slagle, TeSelle and Day have made addresses. Crandall has finished a supplement to his book on Florida Common Law Practice. TeSelle has supervised a fact finding study in Bankruptcy for the Attorney General of the United States. Day has contributed to the Seventh and Eighth Yearbooks of School Law and supervised the preparation of Florida Case Comments for the Florida Law Journal. Case comment writing involves an analytical study of contemporaneous decisions, and more intensive instruction on the technique thereof has been planned.

The faculty has adjusted the law curriculum to present conditions, weighing the relative value of its courses in the light of modern tendencies. To keep the right balance between the good old and the good new, between courses of intellectual content and of laboratory nature, is a challenge to ingenuity and wisdom. We have thought it well to continue concentration on the difficult law subjects which seldom are learned well out of school rather than to expand "laboratory experience" over matters of little intellectual content which fall within the daily routine of lawyers. The advisability, however, of offering additional courses which would call for the employment of another teacher is under consideration.

DEGREES

For the biennium 54 students, or over 40% of our first-year students, had academic degrees before they entered. Twenty-eight law degrees were given in 1938; 39 in 1939; and 49 in 1940 (exclusive of the summer term).

HONORS AND PRIZES

In 1939 the Redfearn prize was won by William G. Carver of Lakeland; in 1940 by Monroe E. McDonald of Sebring. The first-year prize of the Harrison Company was won in 1939 by Ed. B. Rood; in 1940 by Philip K. Yonge. The senior prize offered by this company was won in 1939 by Guy A. Race; in 1940 by S. O. Carson. The Nathan Burkan Memorial Prize of $100 for an essay on some phase of copyright law was won in 1939 by David Kerns; in 1940 by Delbridge L. Gibbs, an employee of Station WRUF.

STUDENTS AND ALUMNI

Our students have participated effectively in campus life, holding for the past two years the presidency of the student body and of the honorary leadership fraternity, the Blue Key, and twice during the past three years the chancellorship of the Honor Court. During the past year they have to their credit the presidency of the F Club and of the Athletic Council. Also, they have been outstanding as intercollegiate debaters.

On faculty recommendations, S. O. Carson, Law '40, has been appointed law clerk for the State Supreme Court. The Senior Law Loan Fund started by the Class of 1938 is growing and loans therefrom have been made to four students. Three of our alumni—Russell McCaughan, Ivan Odle, and Stanley L. West—are preparing a monograph on the Florida Bill of Rights for the Junior Bar Conference of the American Bar Association. J. Velma Keen, Law '22, has been elected President of the State Bar Association and William

J. Barker, Law '16, formerly circuit judge, has been appointed United States District Judge for the Southern District of Florida. J. Edwin Larson, Law '33, has been nominated Treasurer and Spessard L. Holland, Law '16, Governor of the state.

LIBRARY

Over 14,000 volumes are in our library; although well selected, this number is relatively very small and effort should be made to expand it at a more rapid rate. Legal periodicals are very helpful in research, and of these we now have a total of 34 sets, the Cincinnati, Iowa, Oregon, Texas, and Wisconsin law reviews being added during the last two years. The relative scarcity and high quality of the Iowa and Wisconsin sets make them especially valuable acquisitions. Among other additions may be mentioned Fletcher, Cyclopedia of Corporations, 20 volumes; Huddy, Cyclopedia of Automobile Law, 21 volumes; Tiffany on Real Property, 6 volumes; and Walker on Patents, 4 volumes. The library has completed its collection of the United States Statutes at Large and now has a complete set from 1789 to date. Grateful acknowledgment is made of several valuable gifts, the largest being the donation by Wm. B. Myers of Tallahassee of 143 volumes of legal texts and treatises.

Additional personnel has allowed more attention to library service. The library is catalogued, the Columbia practices and subject classification being followed. Through the cooperation of the University Library and the WPA it has been possible to have many volumes and miscellaneous reports bound at an extremely low cost.

LIBRARY BUILDING

Work began last February, 1940, on a four-story concrete and brick building to house the law library. Conforming to the architectural plan of the main building, it has a book capacity of 60,000 volumes and study space for 150 students. The special attention given to lighting, ventilation, book arrangement, study conditions, and fire resistance will make it an admirable and vital addition to our plant; but funds will be required for its equipment and for the partitioning of the old library into offices and student consultation rooms which long have been much needed.

CONCLUSION

Acknowledgment is made of the good spirit with which the faculty has met the added burdens of the biennium. Classes have been met as usual — a policy of which we have long been proud. Much credit is due the executive secretary for the prompt handling of the business of the College, the efficiency of its placement service, and the amplitude of its advice to students. Never have students been more alert to current problems or more creative in thought. Herein the College finds its hope for the future.

Respectfully submitted,

HARRY R. TRUSLER, *Dean.*

REPORT OF THE DEAN OF THE COLLEGE OF EDUCATION

To the President of the University.

SIR: During the biennium several things of importance have happened. Some of the most important of these are:

1. The completion of the P. K. Yonge building and the improvements on the playground of the Laboratory School;
2. The development of the Florida Program for the Improvement of Instruction;
3. The announcement of new certification requirements.

These will be discussed in order.

1. Early in 1939, through a grant from the WPA and the generosity of the General Education Board, the completion of the third floor of the P. K. Yonge building, the addition of an annex to the industrial arts shop, and extensive improvements on the playgrounds of the Laboratory School were made possible. These additions and improvements cost about $60,000. The General Education Board gave $14,457.13 as the sponsor's contribution and the rest of the amount was made available through the WPA. Only about one-fourth of the third floor has been usable up to this year. With its completion much more commodious quarters are available for the Doe Museum, for the business education department, for the music department, for the curriculum laboratory, and for art and drawing. All these divisions have been cramped for quarters up till this time. The annex to the shop has just about doubled the space devoted to industrial arts.

In connection with the additions to the buildings, considerable improvements have also been made on the grounds. Among these should be listed, (1) three handball courts; (2) three volley ball courts; (3) four paddle tennis courts; (4) six tennis courts; (5) three shuffleboard courts; and (6) a cinder running track. It is believed that all of these improvements will make it possible for the College of Education and the Laboratory School to do much more effective work, especially in the departments most directly affected.

2. The immediate occasion for making a request for funds with which to complete the third floor was the necessity for space to house the Curriculum Laboratory. The Curriculum Laboratory is the home of the Florida Program for the Improvement of Instruction. This venture is sponsored jointly by the College of Education and the State Department of Education. It is carried on during both winter and summer, and is described more completely in the report of the director of the Summer Session. The Florida Program is an attempt on the part of the two sponsoring institutions to improve the instruction in the schools of the state. The Laboratory itself consists of workrooms and a library. In the latter are housed a collection of books, pamphlets, and mimeographed materials, of all kinds on curriculum problems. The Laboratory School was selected as the beginning school in the Florida Program and it is planned that each successive year it will serve as the "parent" school in improving the curriculum and to aid in introducing these improvements into the ever-widening circle of schools.

3. A third happening of importance mentioned above during the biennium was the announcement by the State Department of Education of new require-

ments for the certification of teachers. The most significant of these changes is that after September 1, 1940, every applicant for a graduate certificate must present as a part of his credits three semester hours of observation and practice teaching, and after September 1, 1941, double this amount or six semester hours. At a recent meeting of the Southern Association a similar requirement was passed and the Association defined what it meant as follows:

> The six-semester-hour course in practice teaching should include a minimum of ninety clock hours in integrated work in methods, observation, participation, and teaching, with a minimum of sixty per cent of the time devoted to actual teaching.

This will mean for us that we shall have to provide facilities for practice teaching (1) not only for those who are graduated with four and five year degrees but for those who apply for an undergraduate certificate as well; (2) not only for those who are graduated by the College of Education but also for the graduates of any other college on the campus who may apply for certification; (3) not only for graduates of the winter session but of the summer session too.

Over a twelve months' period the University will have not less than 300 candidates for certification. The Southern Association says that 60 per cent of ninety clock hours, or fifty-four clock hours, should be devoted to classroom teaching. If we meet this requirement it is evident that the University must provide over a twelve months' period facilities for 16,200 clock hours of classroom teaching. If we assign 900 clock hours (100 a month for nine months) to each classroom, 18 classrooms every minute of every day for the entire scholastic year would be necessary to meet the requirement. Furthermore if a critic teacher be assigned to each classroom it would require 18 critic teachers to do the work. Or if we look at it another way and assign one critic teacher to every fifty candidates it would require six.

On the face of it the requirement seems absurd. No one school and no county system of schools should be expected to carry this burden alone. It is my opinion that the requirement should be abandoned and the state, through its supervisors, should undertake the job of supervising newly certificated and inexperienced teachers during the initial year of teaching. The teacher education institution should not attempt to do this for by its nature it can do other things more effectively. It can provide demonstration teaching and observation. It can study schools and their purposes, the curriculum and its reconstruction, methods, history and philosophy of education, the social bases of school and society, and perhaps may even provide some practice teaching where the number of students is small. If, however, it attempts practice teaching on any such scale as shown above it will almost certainly develop artificialty and abnormality.

The position seems to have been taken that it is all right for prospective teachers to practice on children before they have accepted a job, and when they are not paid for the privilege, and usually under abnormal conditions, but terrible to do so after they have accepted a position, are paid for it, and are teaching an actual class under actual conditions. Furthermore, it has been thought fair for the schools (and children) near a teacher-preparation institution to bear this whole burden. This would seem not to be exactly fair.

As long as the requirement is on the books, however, we must try to meet it. At present the most feasible plan seems to be a system of interneships.

As I see it this interneship teaching would take two forms. The first of these would be to send prospective teachers out to some school for a semester where they would study that school and the problems relating to his chosen field. The second, would be to supervise those teachers already in service, who take their degrees by attendance at summer school, in their own classrooms.

It was stated above that 18 critic teachers would be needed to do this work adequately. One-tenth of this number, or two, is being requested in the budget.

THE LABORATORY SCHOOL

The Laboratory School has continued its work as in previous years. At several times during the year, the school is kept open on Saturday so that the teachers in the state can come to visit and observe. During the past biennium 1,520 persons registered as visitors in the school and many more came for observation who did not register in the visitors' book. On each of these special Saturday visiting days, opportunities are provided for consultation with faculty members for any visitors who may have special problems or who seek special information and suggestions. As might be expected, this results in a considerable amount of correspondence between teachers of the state and members of the Laboratory School staff. Questions are continually being brought to the School for solution by the school people of the state. In this way the Laboratory School renders a distinct service to the public schools.

The enrollment in the School has been maintained at a constant number. All grades have been filled to the maximum, with a large number of names on the waiting list for each grade. The kindergarten has become so popular that its quota is filled two and three years in advance. The policy of the School has always been to admit pupils in the order of application. No attempt has been made to select either on the basis of mental capacity or for financial considerations.

THE BUREAU OF EDUCATIONAL RESEARCH

The Bureau of Educational Research is proud to report that during the biennium a great many materials have been produced either by them or in cooperation with others. The Bureau reports that during the biennium members of the staffs of the College of Education and the Laboratory School have had published or have submitted for publication six books, thirty-seven magaine articles, and twenty-one bulletins, and have contributed in one capacity or other to seven bulletins published by the State Department of Education. These publications are now being used to an increasing degree. In addition to these contributions members of the faculty have participated in numerous programs of one kind or other, have made numerous addresses at educational meetings, and have participated in panel discussions on a great many occasions.

The work of the Bureau has not only helped a great many schools in Florida but has also had its effect upon laboratory schools in the Southeastern part of the United States and in a lesser degree in other areas. It has assisted the work of the Southern Association of Colleges and Secondary Schools in its attempt to improve the work of laboratory schools and student teaching. It has provided a large body of information for use in occupational study and vocational guidance, and has produced a rather large body of material along other lines.

SUMMARY

One of the greatest problems that the College of Education has faced throughout the years is the relationship with subject matter departments. We do not have the enrollment large enough in each one of the subject matter fields to justify a separate class for those who expect to teach. For this reason the prospective teachers have, in a way, been lost among a large group of students who do not plan to become teachers. No special consideration can be given to the prospective teachers for this reason. The subject matter fields have heretofore had to give to the teachers, the general work which they give to all students whether they are going into teaching or not. Without it being intended this has meant that the prospective teachers do not have professionalized subject matter courses. This has always been one of the great needs of the College. For the past few years, especially during the biennium which has just closed, attempts have been made to remedy this matter. Some members of the subject matter fields have been invited even to direct certain courses in education especially those in observation and special methods and numerous conferences have been held with subject matter professors with the hope that a better coordination could be brought about between theory and practice. About sixteen per cent of the work of a prospective teacher enrolled in the College of Education is devoted to professional courses in Education. About eighty-four per cent of his work is done in subject matter courses in other colleges. It is quite difficult to bring about a proper coordination of the efforts of all these instructors. Efforts are being made, however, and some progress seems to be the result. During the next biennium it is planned to do a great deal more along this line than has been the case in the past.

During the twenties the slogan for the education of teachers was a two-year diploma for those teaching in the elementary school and a four-year degree for those teaching in high school. This standard has not been met completely at the present time, but advance is being made toward this goal. So much progress has been made in fact that the College of Education has felt justified in discontinuing its two-year degree which has been called the Normal Diploma. We now come out boldly for a four-year degree for those teaching in the elementary school and a five-year degree for those teaching in high school. The advancement which has been made in the last ten years justifies us in thinking that if a similar advance is made in the next ten years this goal may be very nearly reached. If this goal is to be reached, however, a great deal of thinking and planning for the fifth year is going to be necessary. At the present time, the master's degree is to a large extent a research degree and the requirements for this degree are designed for those who are doing research. The masters' degree, however is in fact to a large extent a teachers' degree for nearly everyone who takes a masters' degree goes into teaching. Some years ago a study was made and it was found that eighty-five per cent of those who took masters' degrees at the University of Florida went into teaching. Ninety-three per cent of those now enrolled in the first term of the 1940 Summer Session are either teachers or are preparing to teach. A teacher should be broad in his outlook rather than a narrow specialist. Consequently, if a fifth year should become our aim in the prepara-

tion for teaching, a great deal of planning will be necessary and perhaps some of our fundamental conceptions of graduate work will have to be changed.

It will be seen from the above that the work of the College of Education is constantly expanding. This means increased duties and responsibilities. The College will continue to try to meet these responsibilities as they arise.

Respectfully submitted,

J. W. NORMAN, *Dean.*

REPORT OF THE DIRECTOR OF THE SUMMER SESSION

To the President of the University.

SIR: In my biennial report for 1938 attention was called to several stages in the growth and development of the Summer Session. Roughly these may be divided as follows:

1. From 1913 to 1920, inclusive.
2. From 1921 to 1929, inclusive
3. From 1930 to 1934, inclusive
4. From 1934 to the present.

The first of these was characterized by review for the state teachers' examinations and the extension of certificates; the second, by the rather rapid development of college work for teachers; the third, by the development of college work for students other than those preparing to become teachers; and the fourth, by the phenomenal growth of graduate work.

Comparatively little college work was done during the first stage. Even as late as 1920 only about one-third of the registrants, or 263 out of a total of 743, claimed to be graduates of high school. As may be inferred, therefore, much of the work of those early years was below college grade, designed as a review for the teachers' examinations. Our records show that from 85 to 90 per cent of all those in attendance indicated this or its companion, the extension of certificates, as their purpose for attending the Summer Session. During this period on the college level one man was usually sufficient for each department. There were not many courses of college rank and the enrollments in these were usually small. At the same time there were many classes for review and the numbers enrolled were large. During this second stage these classes became both relatively and actually smaller. In 1930 these were discontinued entirely. Since then only courses of college rank have been offered.

In the third stage college work for students other than those preparing to become teachers developed rapidly. Until 1929 the College of Education was the only college on the campus that was officially open in the summer. Since that year most of the other colleges have been open in one capacity or other and college work for teachers and college work for students other than teachers have developed side by side.

The fourth stage of development has witnessed the rapid growth of graduate work. In 1934, the last year of the single term session, there were 16 students registered in the Graduate School. In 1935, the first year of the two term sessions, there were 148, and in 1939 there were 489. As this is written, dur-

ing the first term of the Summer Session of 1940, there are 354 registered in the Graduate School and with the normal expectancy for the second term the number will reach about 600 for the session.

The description of these stages discloses certain functions that the Summer Session has been serving. There are several of these. Without doubt the preparation of teachers should be listed as the first and most important. Also, without doubt, the education of students other than those preparing to teach should be listed as an important function of the Summer Session. Some would perhaps list graduate work as a separate function, but evidence seems to prove that the rapid growth of graduate work is an indication of the preparation of teachers advancing to ever higher levels. This statement is made because a recent check on the graduate students of the first term of the Summer Session of 1940 revealed that 270 of the 354 students enrolled are majoring in Education and of the 84 remaining, 55 are teachers but majoring in a subject matter field. For this reason it seems that graduate work is a part of other functions and hence is not listed as a separate and distinct function on its own account.

These, then, have been thus far the main functions of the Summer Session. Others, however, are now clamoring for recognition. Realizing this the Summer Session Council recently requested that a committee be appointed to redefine the functions of the Summer Session. This committee recommended that three other functions be added to those already enumerated, namely, (a) to render all possible cooperation to the State Department of Education in its program for the improvement of instruction and the public schools generally; (b) to meet any legitimate demands for carrying on research in the summer; and (c) to study constantly the needs of the state for summer school offerings and to adjust the program of the Summer Session to changing demands in education.

Something is already being done about the first of these. In the summer of 1939 the State Department of Education and the Summer Session began a project for the improvement of instruction in the public schools of the state. In that year the entire faculties of six high schools—now spoken of as cooperating schools—came to the Summer Session for an intensive study of their educational problems. In 1940 there are twelve such schools, except that in some cases both elementary and high school faculties are included. It is planned by the State Department to continue this procedure until the whole state is covered. Other institutions than the University will be involved but it was the first to participate in the project and should continue to be a leader in the program.

A second part of this program is the writing of bulletins for the State Department. A selected group spend their entire time writing bulletins. This is concentrated research and has received much approval from the teachers in this and other states.

The second of these new functions is that of research. This has never been separated from teaching duties for special consideration. During the scholastic year just closed the Research Council made a study of this problem and made certain recommendations. They called attention to the fact that in some cases classes have been so small that they have been discontinued and salaries reduced accordingly. The instructor thus affected has

under these circumstances had to pursue his research without a salary in the summer. Furthermore if a professor has no classes that would fit into the Summer Session program but is engaged in important research he would have to pursue his research without salary. The Research Council recommended that twelve professorships at $400 each and 25 scholarships at $110 each be set aside for research during the Summer Session. The Summer Session Council has expressed its desire to provide facilities for all worthy purposes of this kind.

It is the purpose of those in charge of the Summer Session "constantly to study the needs of the state for summer school offerings and to adjust the program of the Summer Session to changing demands in education," as recommended by the committee referred to above. The Summer Session is constantly growing and its general condition seems to be healthy. There seems to be no reason at present why this state of affairs should not continue.

Respectfully submitted,

J. W. Norman, *Director.*

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, 1940.

CURRICULAR REVISION

Our experiments in the "Project" method continue to occupy our major attention, and the developments of the technique of this procedure are producing gratifying results.

Our curricula and methods of teaching have attracted national attention, and the director was requested to present a paper on our philosophy and methods at the 1940 national convention of the American Institute of Architects. This paper was well received and has been published by the Institute in a symposium on "Philosophies Underlying Teaching of Architecture."

IMPORTANT PROBLEMS AND PROJECTS

Our problems and projects have been principally in the field of instruction.

As extra curricula work the faculty participated in the professional organizations in their particular fields of endeavor and have served as officers and committeemen and otherwise. They have given lectures, have exhibited their designs and paintings, both locally and elsewhere, served on committees for the benefit of the municipality and their professional organizations. They have assisted in developing musical and other interests for the benefit of the general public, and during the summer they have taken part in professional competitions and have pursued advanced studies on fellowships and otherwise.

Students of this division have been appointed to various scholarships and fellowships during the biennium. In order to broaden the knowledge and interests of the general student body, as well as to supplement the regular

studies of our own students, we have brought to the campus a series of traveling exhibitions,—architectural, painting and commercial art. A special exhibition of student work in Architecture and Painting was prepared and circulated among certain high schools of the State in order to inform high school students of little-known aspects of these vocations.

We have had a number of special lectures on particular subjects not in the routine of the curricula.

FACULTY PERSONNEL

At the beginning of the biennium we lost our Instructor in Painting to the University of Illinois, who paid him a considerably greater amount than we had available. And the second year of this biennium, we lost an Associate Professor in Architecture, who has gone into private practice. The vacancy caused by the latter resignation has been the occasion for an adjustment of the duties and professorial rank of several of the faculty members, with the advancement of one of the present faculty to an Associate Professorship and the securing of a new man at the grade of Assistant Professor.

RECOMMENDATIONS

The greatest need year after year for the School of Architecture and Allied Arts has been adequate space in which to conduct the work in a modern manner. Office space for faculty members has been inadequate. We do not have room in which to make available the building materials and other equipment which students should become familiar with by examining and having present where they could refer to it at psychological periods. Students do not have the space needed for creative work. Advanced students should have space where they can pursue their work without interruption from the usual activities which necessarily take place about them in the present crowded quarters. Much work has taken place in unlighted and unventilated attic rooms and where the fire hazard is great.

It is in the nature of much of this work that it should be exhibited both for the benefit of the professional students and the students at large in the University, but no space has been adequate for such purposes although a teaching exhibition gallery is of prime importance.

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 1938-1939 and 1939-40.

The vigor with which the General College program is attacked or defended daily throughout the year indicates that there is something here of vital concern. The bold assumptions of progress tests, comprehensive examinations, student responsibility, guidance from materials studied, motivation by knowledge of standing, advancement on achievement only, separation of the examining function from the teaching function, the two years given for a student to find himself, the new "sorting out" process, the more objective and valid

instruments of measuring progress, combination of lecture and discussion methods of teaching, wide reading, etc., are discussed pro and con almost every hour of the day.

Of course a general education program is desirable for those who drop out, but the question is often raised concerning the effect of those who stay and graduate from the University. Does the General College, by making a better program for those who drop out, operate to discourage those who want to go on to technical and professional work, and are lower academic standards involved?

At the end of the year 1939-40, the second class which had completed the program of the General College graduated from the University. The little evidence available does not show that the University is in danger of lowering its standards or losing students as was freely predicted by some critics when the new program was launched. The following comparisons are based on the records of the spring graduating classes for the last six years—baccalaureate degrees only.

	1935	1936	1937	1938	1939	1940
Total Number Graduating - - - -	285	299	286	313	323	352
Per Cent Graduating with Honors or High Honors (better than "B" average)	19.6	21.1	21.3	21.1	24.1	19.6
	———Average———				–Average–	
			20.8		21.9	

These figures are in no way conclusive, but they do indicate that the fears felt by some were not justified. The total number of students graduating has continued to increase—economic factors have probably played a large part in this. It has never been our hope that the new program would keep everybody four years, or on the other hand that it might eliminate a larger number of the freshmen. By our guidance program, we are confident that the sorting is better, though the proportion stays about the same. In other words, the program operates to encourage the students who should go on to do so, while those who could profit little by the work of the upper division find this out while they are still in the junior division.

The hardest years—those of making the break with the old curriculum and setting up the new—are past, but we have just begun. We confess freely that our achievement is not up to specifications. We are operating more economically than under the old program. We have "borrowed" instructors from the upper division. We need a small group of men whose primary interest is general education. Our progress has been slow because many of our workers have primary duties and loyalties in the upper division departments that require a great part of their creative ability. This is not an adverse criticism; it is just a statement of fact.

We are revising the syllabi and re-evaluating the reference material of the comprehensive courses in an effort to improve the quality and organization of the subject matter. Our chief interest remains that of putting before the student material with present meaning to aid him in making his own decisions in a rapidly-changing world.

The teaching staff remains one of our main problems. Teachers of comprehensive courses must be the strongest of the University—narrow training will not suffice. An effort is being made to secure for the faculty men whose

primary interest is teaching and whose previous training and experience enable them to present the work of the comprehensive courses. We are attempting to add a limited number of instructors and send back to their own departments some of those who cooperated with us in inaugurating the new set-up, but who are now needed in the growing upper division. Considering the fact that the enrollment of the General College increased from 1508 for the year 1936-37 (the first time that both first and second year students were registered) to 2103 for the year 1939-40, it does not appear that we have been able to keep at a very desirable figure the pupil-teacher ratio. There is an acute need not only for men whose interests and energies are devoted to General College work, but also for additional staff members.

Looking back over the work of the last five years, we feel that our efforts have been in the right direction. We still have much to do in order to make our program what it is projected to be.

Respectfully submitted,

WINSTON W. LITTLE, *Dean*

REPORT OF THE DEAN OF THE GENERAL EXTENSION DIVISION

To the President of the University.

SIR: I beg to submit herewith the tenth biennial report, covering (A) Instruction, and (B) Service Functions, of the General Extension Division for the period July 1, 1938 to June 30, 1940.

A. INSTRUCTION

The General Extension Division has completed 20 years of work, during which time more than 100,000 Floridians have been given helpful instruction.

During the present biennial period, 1938-40, 13,387 adults were registered: 8,565 in correspondence study and classes for formal instruction on the college level; 4,822 for informal instruction in short courses and classes.

In the biennial period 1934-36, only 1,900 people were registered in short courses; yet during the biennium 1936-38, with adequate facilities at Camp Roosevelt, 7,186 persons enrolled.

During the past biennium, 1938-40, the Division was compelled to turn away as many groups as it served, although such groups felt they had as much claim on the resources of the institution as the others.

The University cannot continue to ignore the demand of these adult groups for educational opportunity, and it becomes our duty to present a budget which recognizes the true conditions.

Funds are needed to keep our small but efficient staff intact, to offer more and better short course programs and practical home study outlines and instruction, and to secure the additional personnel and materials necessary to handle the work.

In the following tables, a record of the work accomplished in both Formal (Table I) and Informal (Table II) Instruction is presented.

TABLE I. FORMAL INSTRUCTION

CORRESPONDENCE STUDY AND EXTENSION CLASS WORK FOR CREDIT REPORT OF REGISTRATIONS BY COUNTIES AND TOWNS—BIENNIUM 1938-1940

COUNTIES	Enrollment	No. of Towns	TOWNS
Alachua - -	338	10	Alachua, Archer, Gainesville, Hawthorne, High Springs, Island Grove, Melrose, Micanopy, Waldo, Windsor
Baker - - -	72	4	Glen St. Mary, Macclenny, Olustee, Sanderson
Bay - - - -	176	9	Bay Harbor, Cromanton, Lynn Haven, Millville, Panama City, Parker, St. Andrews, Southport, Youngstown.
Bradford - -	100	6	Brooker, Graham, Hampton, Lawtey, Starke, New River
Brevard - - -	24	4	Cocoa, Melbourne, Mims, Titusville
Broward - - -	54	5	Dania, Deerfield, Ft. Lauderdale, Hollywood, Pompano
Calhoun - - -	199	4	Altha, Blountstown, Clarksville, Kenard
Charlotte - -	21	4	Boca Grande, Charlotte Harbor, Punta Gorda, South Boca Grande
Citrus - - -	24	5	Crystal River, Floral City, Homosassa, Inverness, Lecanto
Clay - - - -	43	7	Doctors Inlet, Green Cove Springs, Keystone Heights, Middleburg, Orange Park, Penney Farms, Russell
Collier - - -	19	5	Chokoloskee, Collier City, Everglades, Immokolee, Naples
Columbia - -	136	3	Ft. White, Lake City, Lulu
Dade - - - -	399	13	Coral Gables, Cocoanut Grove, Homestead, Hialeah, Little River, Miami, Miami Beach, Miami Springs, North Miami, North Miami Beach, Opa Locka, Perrine, South Miami
DeSoto - - -	39	3	Arcadia, Nocatee, Ft. Ogden
Dixie - - - -	19	4	Cross City, Fletcher, Old Town, Shamrock
Duval - - -	883	9	Atlantic Beach, Dinsmore, Baldwin, Jacksonville, Jacksonville Beach, South Jacksonville, Mayport, Mandarin, Maxville
Escambia - -	711	13	Barrineau Park, Bay Springs, Barth, Cantonment, Century, Bluff Springs, Cottage Hill, Gonzalez, McDavid, Molino, Pensacola, Walnut Hill, Warrington
Flagler - - -	6	2	Bunnell, Flagler Beach
Franklin - -	11	1	Apalachicola
Gadsden - -	42	5	Chattahoochee, Greensboro, Havana, Quincy, River Junction
Gilchrist - -	23	2	Bell, Trenton
Glades - - -	6	1	Moore Haven
Gulf - - - -	22	2	Port St. Joe, Wewahitchka
Hamilton - -	86	3	Jasper, Jennings, White Springs
Hardee - - -	73	5	Bowling Green, Gardner, Ona, Wauchula, Zolfo Springs
Hendry - - -	10	3	Clewiston, Felda, LaBelle
Hernando - -	20	2	Brooksville Hernando
Highlands - -	18	4	Avon Park, Lake Placid, Sebring, Venus
Hillsborough -	360	10	Dover, Limona, Lithia, Plant City, Port Tampa, Tampa, Ruskin, Seffner, Valrico, Wimauma
Holmes - - -	234	6	Bonifay, Dady, Esto, Noma, Ponce de Leon, Westville
Indian River -	70	6	Fellsmere, Roseland, Sebastian, Vero Beach, Wabasso, Winter Beach
Jackson - - -	211	15	Alford, Alliance, Bascom, Campbellton, Compass Lake, Cottondale, Cypress, Graceville, Grand Ridge, Greenwood, Kynesville, Malone, Marianna, Round Lake, Sneads
Jefferson - -	67	6	Aucilla, Lamont, Lloyd, Monticello, Waucissa, Waukeenah
Lafayette - -	29	3	Day, Mayo, Steinhatchee
Lake - - - -	85	13	Altoona, Astor, Clermont, Eustis, Groveland, Howey, Leesburg ,Mascotte, Mt. Dora, Montverde, Sorrento, Tavares, Umatilla
Lee - - - -	43	4	Alva, Estero, Ft. Myers, Sanibel
Leon - - - -	171	4	Chaires, Miccosukee, Tallahassee, Woodville
Levy - - - -	68	10	Bronson, Cedar Keys, Chiefland, Gulf Hammock, Montbrook, Morriston, Otter Creek, Raleigh, Williston, Yankeetown
Liberty - - -	120	4	Bristol, Hosford, Telogia, Sumatra
Madison - - -	73	6	Ebb, Greenville, Lee, Lovett, Madison, Pinetta
Manatee - - -	163	9	Bradenton, Ellenton, Long Beach, Manatee, Myakka City, Oneco, Palmetto, Parish, Tallevast

TABLE I. FORMAL INSTRUCTION

CORRESPONDENCE STUDY AND EXTENSION CLASS WORK FOR CREDIT
REPORT OF REGISTRATIONS BY COUNTIES AND TOWNS—BIENNIUM 1938-1940

(Continued)

COUNTIES	Enrollment	No. of Towns	TOWNS
Marion - - -	170	15	Anthony, Bellview, Citra, Conner, Dunnellon, Ft. McCoy, Lake Kerr, Lowell, Lynne, McIntosh, Ocala, Okalawaha, Orange Springs, Reddick, Summerfield
Martin - - -	13	3	Jensen, Indiantown, Stuart
Monroe - - -	26	3	Marathon, Tavernier, Key West
Nassau - - -	38	6	Brycevile, Callahan, Crandall, Fernandina, Hilliard, Yulee
Okaloosa - -	203	9	Baker, Crestview, Destin, Ft. Walton, Holt, Laurel Hill, Milllgan, Niceville, Valparaiso
Okeechobee -	12	1	Okeechobee
Orange - - -	156	13	Apopka, Christmas, Maitland, Oakland, Orlando, Pine Castle, Plymouth, Taft, Vineland, Wewahotee, Winter Garden, Winter Park, Zellwood
Osceola - - -	17	4	Holopaw, Kissimmee, Narcosee, St. Cloud
Palm Beach -	200	10	Belle Glade, Boca Raton, Boynton, Canal Point, Delray Beach, Jupiter, Lake Worth, Lantana, Palm Beach, West Palm Beach
Pasco - - -	32	10	Dade City, Elfers, Lacoochee, Lake Jovita, Odessa, New Port Richey, San Antonio, St. Leo, Trilby, Zephyrhlils
Pinellas - - -	193	7	Clearwater, Dunedin, Largo, Palm Harbor, Safety Harbor, St. Petersburg, Tarpon Springs

TABLE I. FORMAL INSTRUCTION

CORRESPONDENCE STUDY AND EXTENSION CLASS WORK FOR CREDIT
REPORT OF REGISTRATIONS BY COUNTIES AND TOWNS—BIENNIUM 1938-1940

(Continued)

COUNTIES	Enrollment	No. of Towns	TOWNS
Polk - - - -	105	19	Alturas, Auburndale, Babson Park, Bartow, Brewster, Davenport, Dundee, Eagle Lake, Ft. Meade, Frostproof, Haines City, Lake Alfred, Lake Hamilton, Lake Wales, Lakeland, Mulberry, Pierce, Polk City, Winter Haven
Putnam - - -	77	7	Crescent City, Florahome, Grandin, Georgetown, Palatka, San Mateo, Welaka
St. Johns - -	84	2	Hastings, St. Augustine
St. Lucie - -	90	3	Ancona, Ft. Pierce, Walton
Santa Rosa -	194	5	Bagdad, Floridatown, Jay, Milton, Munson
Sarasota - - -	54	6	Englewood, Laurel, Nokomis, Osprey, Sarasota, Venice
Seminole - -	36	6	Geneva, Longwood, Osceola, Oviedo, Paola, Sanford
Sumter - - -	36	4	Bushnell, Center Hill, Coleman, Webster
Suwannee - -	248	9	Branford, Dowling Park, Falmouth, Lee, Live Oak, McAlpin, O'Brien, Pinemount, Wellborn
Taylor - - -	67	3	Foley, Perry, Shady Grove
Union - - -	77	4	Dukes, Lake Butler, Raiford, Worthington
Volusia - - -	128	15	Barberville, Benson Springs, Daytona Beach, DeLand, DeLeon Springs, Emporia, Holly Hill, Lake Helen, New Smyrna, Oak Hill, Orange City, Ormond, Pierson, Port Orange, Seville
Wakulla - - -	40	5	Arran, Crawfordville, Panacea, Sopchoppy, Wakulla
Walton - - -	225	7	Argyle, Bruce, Darlington, DeFuniak Springs, Freeport, Red Bay, Santa Rosa
Washington -	267	5	Caryville, Chipley, Millers Ferry, Vernon, Wausau

SUMMARY OF TABLE I

	Enrollment
415 Towns in	
67 Counties - - - - - - -	8,056
36 Other states - - - - - -	501
2 Foreign countries - - - -	8
Total Enrollment for Biennium	8,565

TABLE II. INFORMAL INSTRUCTION

SHORT COURSES AND NON-CREDIT EXTENSION CLASSES

REPORT OF REGISTRATIONS—BIENNIUM 1938-1940

SECTION A: SHORT COURSES

COURSE	REPRESENTATION		ENROLLMENT		
	Counties	Other States	Florida	Out of State	Total
1938					
Fire, Casualty and Surety Insurance, July 5-8	24	4	311	19	330
Life Insurance, July 14-16	16		134	....	134
Farm Security Supervisors, Sept. 13-14	39	1	124	17	141
New Rules of Civil Procedure in District Courts of the United States, Dec. 2-3	40	2	364	2	366
1939					
Concrete Products, April 4-5	19	4	76	10	86
Municipal Finance Officers, April 11-13	6	1	14	1	15
Home Furnishing, May 15-17	8	2	23	7	30
Architects, May 18-19	11	1	30	1	31
Photographers, May 22-24	16	6	77	14	91
Bankers, June 6-9	31	3	78	4	82
Parent-Teacher Leadership, June 6-9	32	....	366	....	366
Garden Clubs, June 14-16	18	1	62	1	63
Reading Problems, June 26-30	20	3	42	3	45
Fire, Casualty and Surety Insurance, July 5-8	26	5	293	18	311
Barbers, July 17-18	10	....	31	....	31
Life Insurance, July 20-21	20	....	156	....	156
Water and Sewage Treatment, Oct. 18-20	20	5	37	5	42
Attorneys-at-Law, Nov. 24-25	29	....	234	....	234
1940					
Treatment of Delinquents and Preventing Delinquency, Feb. 18-20	26	6	170	9	179
Planting and Preservation of Trees and Shrubs, Feb. 22-24	19	15	62	33	95
Boy Scout Leaders, March 1-3	22	2	75	18	93
Social Case Workers, March 29-30	8	....	54	....	54
Municipal Finance Officers, April 8-9	18	1	56	1	57
Concrete Products, May 14-15	26	2	100	6	106
Photographers, May 20-23	18	4	108	13	121
Bankers, May 27-30	27		74	....	74
Garden Clubs, May 29-31	19	1	80	2	82
Parent-Teacher Leadership, June 4-7	34		431	....	431
TOTAL REGISTRATION FOR SHORT COURSES					3,846

SECTION B: NON-CREDIT EXTENSION CLASSES

COUNTY	CENTER	REPRESENTATION		Total Enrollment
		Counties	Towns	
Broward	Ft. Lauderdale	1	3	35
Dade	Miami	1	5	170
Duval	Jacksonville	3	3	216
Escambia	Pensacola	1	1	52
Hillsborough	Tampa	3	7	132
Leon	Tallahassee	3	4	40
Marion	Ocala	4	4	26
Orange	Orlando	4	11	64
Palm Beach	West Palm Beach	3	5	71
Pinellas	St. Petersburg	2	5	83
Sarasota	Sarasota	3	3	35
Volusia	Daytona Beach	1	3	50
TOTALS 12	12	24	47	976

SUMMARY OF TABLE II

Section A.	Short Courses:	
	Total number of courses offered	28
	Total enrollment in short courses	3,846
Section B.	Non-Credit Extension Classes:	
	Total number of centers	12
	Total enrollment in the courses	976
Total enrollment in short courses and non-credit classes		4,822

B. SERVICE FUNCTIONS

Through the service functions of the Division information and materials are furnished as supplements to instruction in the public schools and as aids to adults in their educational endeavors. The value of these services is indicated by the large circulation and by the fact that repeated requests from many persons have brought the number of contacts made during the last ten years to more than two million. During the past biennium nearly three quarters of a million persons received incidental instruction through slides and films borrowed from the Division.

The circulation of all loan materials has been greater in 1938-1940 than during any previous biennium. This has been made possible by loans and gifts from publishers, clubs, and individuals which have supplemented the library materials of the Division, and by the development of a cooperative film library supported by public schools and by industrial organizations interested in the State.

However, it is evident that this part of the State's educational program cannot continue to meet the needs of the public if it must be dependent in a large measure upon private support. Consequently, more funds are requested.

Materials were lent to borrowers in every county of the State during the past two years, and the amount of service rendered is shown in the following table:

SERVICE FUNCTIONS

Circulation Report Biennium 1938-1940

Materials	No. of Loans		No. of Individual Contacts
Books	18,951		18,951
Traveling Libraries	367	units	5,814
	5,814	books	
Package Libraries	1,739	units	1,739
	23,920	articles	
Plays	4,785		4,785
Prints and Posters	3,274		3,274
Phonograph Records	2,767		2,767
Slides	826	sets	49,133
	30,403	slides	
Films	1,750	films	
	6,631	shows	652,571

SUMMARY

Number of Loans	34,459
Number of Individual Contacts	739,034

SUMMARY OF INSTRUCTION AND SERVICE

Correspondence Study and Extension Class Work for Credit	8,565	enrollments
Short Courses and Non-Credit Classes	4,822	enrollments
Service Functions	739,034	individual contacts

COOPERATION WITH GOVERNMENTAL AGENCIES

The Division continues to cooperate with governmental agencies in their program of training in service, when requested. The Dean of the General Extension Division has just finished his eighteenth year as State Civilian Aide to the Secretary of War, and has carried on the annual procurement campaign for the Citizens Military Training Camps.

PROFESSIONAL RECOGNITION

In addition to their regular duties, the administrative staff of the General Extension Division has served many organizations in various capacities. Mrs. Bernice Mims is Secretary to the Committee on Visual Aids of the Florida Education Association. Mr. Burt W. Ames is Secretary to the Florida Committee on Civic Education. Mr. G. Manuel Turner at the request of several professional and business groups has acted as their educational adviser. Mrs. Edith McBride Cameron served as a member of the Committee on Publications of the National University Extension Association and is conducting a page entitled "The Round Table" in the national bulletin. The Dean has served as President of the National University Extension Association.

CONCLUSION

Offering educational opportunity through 13,387 enrollments in instruction and rendering service through nearly three quarters of a million individual contacts in other ways has produced a tremendous pressure and taxed to the utmost the six faculty members of the administrative staff of the General Extension Division. A lack of equipment and materials has made the situation doubly hard to handle. It is sincerely hoped that proper recognition can be given to the program and its value to the people of the State through additional appropriations which will remedy these conditions.

Space will not permit further elaboration of the work and accomplishment of the Division; however, detailed reports of the several constitutional departments are in the files in the offices of the General Extension Division.

Respectfully submitted,

B. C. Riley, *Dean*

REPORT OF THE UNIVERSITY LIBRARIAN

To the President of the University.

Sir: I have the honor to submit to you the following report on the Library of the University of Florida for the biennium ending June 30, 1940.

In August, 1939, the Library had the misfortune to lose two of its staff members by death, Mrs. Amy Fetzer, Order Librarian, and Miss Henrie May Eddy, Acting Librarian since October 1, 1937. Mrs. Fetzer established the Order Department of the Library in 1937. Miss Eddy had served as Reference Librarian, and she was President of the Florida Library Association. New staff members have been appointed as follows: One in the Cataloging Department, October, 1938; One in Periodicals and Binding, September, 1939; Head of Circulation Department, September, 1938; Order Librarian, September, 1939; and Librarian, September, 1939. The former Periodicals and Binding

Librarian became Reference Librarian. September 1, 1939. An Assistant in Reference and Cataloging was appointed October 1, 1939. Resignations have been as follows: In Cataloguing, one; in Reference, one; in Circulation Department, one; and one Assistant in Cataloging and Reference.

The total number of volumes catalogued in the main library on June 30, 1939, was 109,250. In addition, the number accessioned to June 17, 1940 was 5,750. On June 30, 1939, books in the branch libraries were as follows: P. K. Yonge Laboratory School, 4,350; Agricultural Experiment Station, 15,000; Law Library, 13,300; General Extension Division, 9,731.

In November, 1939, the WPA Book Repair Project was established. To date, 572 books have been bound, including practice work. There are five workers, including a bookbinder of eight years' experience. The work is done on the fourth floor of the Library.

Arthur S. Smith, an NYA student, completed a Bibliography on the Seminole Indians, representing thirteen months work. It has been duplicated and sent to twenty Florida libraries. The Librarian, assisted by Mr. Smith, compiled a list of 189 poems about Florida and places in Florida.

Papers presented at meetings by staff members were as follows: by Miss Henrie May Eddy and Mrs. Elizabeth T. Jernigan, before the Southeastern Library Association, Atlanta, Georgia, October 28, 1938; by Walter B. Hill, before the Florida Library Association at DeLand, April 5, 1940. Mrs. Jernigan, Secretary of the Florida Library Association, wrote an article in the Library Journal, January 1, 1939.

The Florida Collection has been moved to the fifth stack level, where it is protected by a wire partition. The office of the Dean of the University is in the former Florida Room.

The FRIENDS OF THE LIBRARY have been very active during the past two years. Since July 1, 1938, over 300 books have been presented to the Library through this organization. They have also sent out six bulletins.

PERIODICAL DEPARTMENT

The increase in the binding fund has enabled us to bind about twenty periodicals not bound before. Some valuable serial runs have been added. In 1939 a list of the duplicate periodicals was sent to 85 libraries. By means of exchange, valuable publications have been received. The department has compiled an alphabetical list of periodicals currently received; also one arranged by subject, and a list of all holdings. A Kardex Visible record is now used to check all periodicals currently received.

As a result of a study of newspapers preserved in other Florida libraries, it was decided to preserve the files of eight Florida newspapers and four out-of-state papers. Files of six state papers were sent to other Florida libraries that will preserve them.

Exchange relationships are maintained with most of the large university and college libraries in the country. Many valuable university bulletins and studies are received in this way. Two Engineering Experiment Station Bulletins have been sent out; one Education series and one Biological Science series. In exchange for the Southern Folklore Quarterly and Journal of Politics, the Library receives valuable historical and cultural periodicals.

REFERENCE DEPARTMENT

The number of volumes added to the Reference collection, 1938-40, was

660. The Florida Collection has been increased by 725 cataloged volumes, and many uncataloged. An Argus Reader for reading microfilms has been secured. Additions to the Reference collection have included: Encyclopedia Italiana; Moulton's Library of Literary Criticism; Kelley's American Catalog of Books (reprint); Roorbach's Catalog of American Publications; James T. Adams' Dictionary of American History; Encyclopedia of Canada. The following sets were completed: Cambridge Ancient History; Cambridge Modern History. A number of standard titles included in the tentative list of the Reference books recommended by the Southern Association of Colleges and Secondary Schools have been added. The number of books loaned to other university libraries was 53 in 1938-39, and 97 in 1939-40. The number of books borrowed from other libraries was 97 in 1938-39 and 154 in 1939-40. The Library has cooperated in checking for the new edition of the Union List of Serials.

CIRCULATION DEPARTMENT

The Reserve Room serves all General College students. It has about 3,500 General College books and about 3,000 belonging to the upper division. In accordance with recommendations made by the Survey Committee, all books in which reading assignments are made, have been placed behind the desk. These books are loaned for two hours, over-night, and over weekends. This made more space available for readers. All books for optional or recommended reading have been placed on open shelves in the front of the Reserve Room. The Reserve books are shelved in a room off the Reserve Room, formerly used for storage.

CATALOG DEPARTMENT

The Bulletin of Recent Accessions was again issued by the Catalog Department, beginning September 1938, after having been suspended in 1932. The Catalog Department completed an extensive re-cataloging of General Extension Division books, and the re-cataloging of all volumes in the discontinued Teachers Collection. The lighting of the Cataloging office was much improved by the installation of fluorescent lights.

SURVEY

In February, 1940, a survey of the University of Florida Libraries was made by a committee working under the direction of the American Library Association. The committee was composed of Dr. Louis R. Wilson, of the University of Chicago, Dr. A. F. Kuhlman, Director of Joint University Libraries, Nashville, Tennessee, and Mr. Guy R. Lyle, of the Women's College of the University of North Carolina. A grant of $2,000 from the General Education Board made the survey possible. Since the report of the survey is to be published before September, 1940, detailed recommendations will not be made in the report of the Librarian. The Library needs badly an assistant in Reference, who would have charge of the valuable collection of government documents. An Assistant in Periodicals and Binding is also needed.

I wish to express my appreciation for the help of Dean H. W. Chandler and all members of the Library staff.

Respectfully submitted,

WALTER B. HILL, *Librarian.*

REPORT OF THE PROFESSOR OF MILITARY SCIENCE AND TACTICS

To the President of the University.

SIR: I respectfully submit the biennial report of the Department of Military Science and Tactics for the period ending June 30, 1940.

The courses of instruction have been carried out in accordance with the War Department program of training. The annual strength of the Cadet Corps has averaged about 1600 students. One hundred and thirty-four students were awarded reserve commissions in 1939, and one hundred and forty-one in 1940. Five honor graduates have received commissions in the Regular Army, and one in the Marine Corps.

We have endeavored to give the maximum amount of instruction in the available time. It is gratifying that, each year, the units have been awarded the highest rating for efficiency, as the result of the annual inspections.

Through the cooperation of the President and the University Physician, the physical examinations of applicants for advanced course contracts were made this year by the medical staff at the University Infirmary. This is distinctly a warranted and worthwhile service, which is appreciated not only by the Military Department, but especially by the students, who heretofore have paid for this service at a cost of from three to five dollars per examination. Prior to this year, obtaining these physical examinations has been a problem for the student and for this department. It is strongly recommended that this service be maintained so that all matters pertaining to the physical status of students may be referred to the University Infirmary.

Funds alloted this department have been used for maintenance, upkeep, office supplies, and operating expenses.

The personnel and military equipment are adequate and satisfactory.

Students have displayed much interest and a full measure of cooperation in military training.

I wish to express the appreciation of this department for the cooperation and full support accorded us by the President, the staff, and the several colleges.

Respectfully submitted,

S. R. HOPKINS, *Colonel,*
Field Artillery, P.M.S.&T.

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

To the President of the University.

SIR: I beg to submit herewith the following report on the activities of the Institute of Inter-American Affairs for the biennium ending June 30, 1940, together with general recommendations for the biennium beginning July 1, 1940.

During the last biennium, the Institute of Inter-American Affairs has limited its activities to the following fields: The orientation of foreign exchange students; the arrangement of exchange scholarships for Florida students to study abroad; distribution of information regarding Latin American republics to the schools of the State of Florida; sponsoring the annual state high school

Spanish declamation contest; the preparation of special Inter-American radio broadcasts presented over University Radio Station WRUF; arrangement of speaking and educational tours for numerous Latin American students at the University; arrangement of special lectures on educational and cultural aspects of Latin America by visiting American educators; arrangement of a non-credit course in Portuguese given by Mr. Othon M. Garcia, a graduate of the University of Brazil.

In addition to the above, a special Inter-American educational program has been further developed which includes a large number of colleges and universities in the southeastern states, and several of the Latin American Universities. In connection with this program, the Institute has supervised and guided during the past fiscal year the establishment of the special section in the University dormitories known as the *Inter-American Section*. It is operated in a manner generally comparable to that of International Houses located at various universities throughout the world and is composed of an equal number of Latin and Anglo-American students who are especially interested in Inter-American agriculture, commerce, education, or government service.

The highlight of the 1940 program was the Inter-American Educational and Cultural Conference held at the University, April 14-17, 1940, and which was made possible through the generous cooperation of the Carnegie Endowment for International Peace. This was the third conference held by the Institute of Inter-American Affairs, and commemorated the 50th Anniversary of the founding of the Pan American Union and the 10th Anniversary of the establishment of the Institute. The program of the conference was divided into two sections with distinct, although closely related, objectives. The first section included papers presented by distinguished educators and men of letters from the Latin American republics on the educational and cultural aspects of their respective countries. The second section included papers by outstanding speakers from the United States as well as from the Latin American republics on the subject of re-vitalizing and expanding Inter-American education in the elementary schools, high schools, colleges and universities in the Western Hemisphere. In addition to the formal papers, there were various round table meetings to discuss such an augmented educational program.

The number of students from the other American Republics attending the University of Florida has shown considerable increase during the last biennium. No special attempts have been made, however, to get more students, and extreme caution was used in choosing those who were admitted.

Much attention was given to the organization and development of the Inter-American Reading Room for the use of both Latin and Anglo-American students as well as faculty members of the University. To initiate and develop this phase of the Inter-American educational program, the headquarters of the Institute were moved to the fourth floor of the Florida Union where more space was available.

Respectfully submitted,

ROLLIN S. ATWOOD, *Director*.

REPORT OF THE DIRECTOR OF THE FLORIDA STATE MUSEUM

To the President of the University.

SIR: In submitting my report for the biennium of July 1, 1939 to June 30, 1940, and recommendations for the next, I have to say that the general activities have been the finishing of the installation of the material moved from the campus, checking up and making new records.

The records of the Museum, to date, show 3482 accessions, 356,350 specimens, valued at $384,822.41. Since the opening on May 1, 1939, our electric eye register shows 36,359 visitors, and 1396 of these visitors have checked packages.

Our storage room, with its 67 cases is filled to overflowing, and a great many specimens in drawers are stacked up on the floor, with no cases in which to put them, and no place to put more cases if we had them.

Our exhibition rooms on the first floor are filled to a crowded condition. One of the exhibition rooms on the second floor is also filled the same; and the other room, the Hall of Ornithology, has ten habitat bird groups practically finished, nine more to do. With the limited space we are showing the more rare birds of Florida, such as the Carolina Paroquet, Passenger Pigeon, Ivory-Billed Woodpecker, King Vulture, etc.

With the limited means and the limited staff, I am often told that this showing is commendable, and in this connection I want to thank the members of my staff for their hearty cooperation.

RECOMMENDATIONS

Our greatest need at the present time is to finish the Hall of Ornithology, with requires the building of twenty-eight cases, sixteen wall cases and twelve double table cases, at an estimated cost of $7,300.00. The next item is, if we are ever to have the semblance of a state museum, expansion space is an imperative necessity, for which I recommend the finishing of the North half of basement and the extending and finishing of the first four floors to the North line of the building. This last to be a Federal project for which I have assurances of Federal help, and private help for the State's percentage, at a total cost not to exceed $200,000.00.

Respectfully submitted,

T. VAN HYNING, *Director*

REPORT OF THE DIRECTOR OF FLORIDA UNION

To the President of the University of Florida.

SIR: I have the honor to submit to you the following report for the Florida Union, the student activity center of the University of Florida, for the biennium July 1, 1938, to June 30, 1940.

The Florida Union has in the period stated above fulfilled its expressed objectives of: (1) Serving as the official center of student life, unifying student activities, and sponsoring a broad educational program of recreation and entertainment for the Student Body; (2) Serving as a tie binding faculty,

students, alumni, and friends of the University; (3) Aiding in establishing a cultural pattern which will distinguish Florida men.

In this two-year period, in connection with Art Exhibits, Banquets, Luncheons, Club Meetings, Committee Meetings, Conferences, Conventions, Honorary Fraternity Meetings, Educational Moving Pictures, Intramural Tournaments, Lectures, Musical Recitals, Short Courses, and miscellaneous recreational, social, educational, and religious gatherings, there were 3688 meetings in Florida Union, and in the entire program of the Union about 590,000 student- faculty- and visitor-units of attendance and participation.

Considerable additions to the plant of Florida Union during this biennium have been a twenty-acre recreation camp at Lake Wauburg, and the near-completion of the unfinished fourth floor of Florida Union. Major extension of the Florida Union program during the biennium under report was the establishment of a Bureau of Recreational Interests, which examines by questionnaire each entering freshman, discovers his extra-curricular interests and aptitudes, and promotes his development in these fields during his college life.

Respectfully submitted,

D. R. MATHEWS, *Director*

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

To the President of the University.

SIR: I respectfully submit the following report from the Department of Athletics and Physical Education of the University of Florida.

During the biennium now ending, D. K. Stanley, H. R. Sanders, Rand Dixon and L. W. Hardage resigned as Assistant Coaches. Harold Williams, Walter Milligan, Jack Daniel and Harold Stebbins were appointed as replacements. In March 1940, J. C. Cody resigned as Athletic Director and Head Coach. Thomas J. Lieb was appointed Head Coach and Percy Beard, Acting Athletic Director.

The current deficit has been reduced from $22,023.79 as of June 30, 1938 to an estimated maximum of $10,000.00 as of June 30, 1940.

During this period the following additions to the plant were made: six concrete tennis courts, four clay tennis courts partially completed, six new handball courts and six handball courts rebuilt. The varsity dressing and training quarters in the basketball court are being renovated.

During the past year 1786 students participated in Intramural competition — a 10% increase over the previous year. Many of these entered more than one contest since there were 4407 entries. A total of 3220 students used Intramural equipment indicating that practically the entire student body availed themselves of the opportunity to engage in some form of athletics.

Our record on varsity intercollegiate dual competition during the past two years is as follows:

	Won	Lost	Tied
Football	9	11	2
Basketball	20	15	0
Baseball	18	19	1

Boxing	4	6	1
Track	7	1	0
Swimming	15	0	0
Golf	6	2	0
Tennis	21	5	1
Cross Country	0	2	0
Totals	100	61	5

In addition, the swimming team won the Southeastern Conference team championship in both 1939 and 1940. John Joca became Florida's first National Intercollegiate Champion, when he won the lightweight boxing title in 1940.

A steady effort has been made to promote good will and cooperation between the Athletic Department and high schools, alumni and other supporters of the University. This effort will be intensified.

Our most pressing need is a new gymnasium. Our present facilities are hopelessly inadequate in every way and do not compare favorably with those of many high schools in the state. This situation is a handicap in attracting Florida boys to the University.

Respectfully submitted,

PERCY BEARD, *Acting Director.*

REPORT OF THE DIRECTOR OF PUBLICITY

To the President of the University.

SIR: As the maintenance and operation of the University of Florida is largely the responsibility of the State, the people of Florida as taxpayers should be informed as to the activities, the progress, and the needs of the university. The people have a definite stake, now and for the future, in the capstone of the state's educational system.

To the end that informative material on the university can be coordinated and properly disseminated to the press and radio, the publicity Department has given its efforts. Apart from material which is originated by the Department, there are heavy demands on the institution for almost every conceivable type of data, etc., and usually this Department handles this.

As a service agency, the Department actively contributes to and cooperates with the Associated Press, United Press and International News Service, the nation's three news gathering and news distributing agencies, and makes available to the press of Florida and the United States news material, photos, mats and special features.

Additional emphasis was placed this year on the development of the system of student correspondents in order to make more personal and more valuable certain releases sent to daily and weekly papers. Students are appealed to for this service without any compensation offered by the Department, but the St. Petersburg TIMES and Robert F. Sikes, Crestview, past president of the Florida Press Association, make available trophies to be presented the student winners in the competitions arranged.

The interpretation of the University, in its many varied aspects, is an ever-increasing task on many fronts. No information, or improper information, or both, can and does often contribute to retarding efforts of officials to build a great university, and while every student, alumnus, employee, has a

part to play in developing adequate understanding of the institution, the Publicity Department does represent the organized effort in behalf of proper university public relations.

Respectfully submitted,

FRANK S. WRIGHT, *Director*

REPORT OF THE UNIVERSITY PHYSICIAN

To the President of the University.

SIR: The major responsibilities of the Medical Staff throughout the biennium has been the care of:

1. Students who reported to the Infirmary because of acute or chronic illnesses.
2. Physical examinations, including an x-ray of the chest of all entering students who have a positive tuberculin test.
3. Regular sanitary inspection of the campus and buildings.
4. Supervision of the Health Service of the P. K. Yonge Laboratory School.
5. Treatment of injured employees.

A complete record of all cases treated by the Health Service has been kept and classified.

	1938 Summer Session	1939 Summer Session	1938-39 Regular Session	1939-40 Regular Session
Office Calls - - -	2,357	2,181	15,022	19,163
Bed Patients - - -	64	61	610	870
Hospital Days - - -	188	173	2,094	2,451
Deaths - - - -				1

During the regular session of 1938-39, with an enrollment of 3,438 students, 2,623 reported for office consultations. For the year 1939-40, with an enrollment of 3,456 students, 2,712 reported for office consultations. A classification of the diseases shows a predominance of acute respiratory infections, with acute gastro-intestinal upset being almost as large. There has been no epidemic of consequence during this period. Intramural athletics continues to contribute the greatest number of injuries requiring attention.

The Infirmary is on a continuous twenty-four hour service during the college term, the dispensary is open from 7:30 A. M. to 9:00 P. M. daily. The physicians have been in regular attendance and in case of an emergency can be obtained without delay by the graduate nurse, who first sees the patient.

With the increasing of the student body there is an increase in students who should have the benefit derived from a Neuropsychiatrist service, this is particularly necessary for the individual whose mental adjustment is inadequate. Examination and conference with a trained Neuropsychiatrist would be beneficial in assisting this group of individuals to attain proper complete and mental ajustment.

The need for a Department of Dental Hygiene is becoming more evident and the addition of this department should be made when the student body passes four thousand.

During the biennium this department has examined all men engaging in athletics in any form and through the cooperation of the Physical Education Department men are not allowed to participate in any form of athletics unless they present a certificate from this Department. Therefore, physically

handicapped students are prevented from jeopardizing themselves by too much physical activity.

Since the Workman's Compensation Act has been enforced, all accidents of employees are treated by the Medical Staff; therefore, the year 1938-39, 105 cases were treated. In 1939-40, 75 cases were treated.

Instructions have been issued, that the Health Service discontinued regular hours for consultation of students, and is to provide a twenty-four hour service. The Staff must necessarily be increased to meet this demand, as this increase will over-tax the present quarters for nurses, necessitating the provision of quarters outside, or allow the nurse additional money for her expenses.

The present Infirmary was of sufficient size, at the time of its construction, to provide facilities for a Health Service with an enrollment of 2,000 students. The dispensary is over-taxed and it is recommended that additional facilities be provided by the construction of an additional wing to the building.

In 1939-1940 a modern X-ray equipment unit was installed at the cost of $3,773.00.

In 1939 an additional Resident Physician was authorized. Numerous changes have been made in the personnel during this period, new appointments being made to replace those resigned.

Respectfully submitted,

George C. Tillman, M. D., *University Physician*

REPORT OF THE DIRECTOR OF RADIO STATION WRUF

To the President of the University.

Sir: It is my desire to set forth briefly the activity of Radio Station WRUF and the difficulties under which the station operates as a self-sustaining or commercial institution.

Radio Station WRUF has proven itself to be a valuable agency for the dissemination of educational material. This service has meant the saving of untold amounts of money to the farmers and growers in our area of coverage as a result of our weather and market reports. The station has greatly aided in adult education for the citizens of the State. It has been a valuable asset to the State as an advertising medium. All communities in Florida have been granted the privilege of using the station to advertise the advantages of their cities and communities to the people of the northern states. In our weather and market reports, adult educational programs, and advertising activities we have enjoyed the active cooperation of the various departments and colleges of the University and the federal and state governmental agencies.

Prior to the veto of the appropriation bill, the station was used as a laboratory for a large number of University students. Practically every college and department of the University sent students to the station for certain phases of training in the rapidly advancing field of radio. The number of students desiring to take advantage of these opportunities has rapidly increased. The ever-increasing demand for college trained men in the field of radio and allied fields has made it highly desirable for the University to establish a

School of Radio. WRUF-trained announcers, engineers, and continuity writers may be found in every section of the country. These men have done a great deal to advertise the State and they have done much to build up an enviable reputation for WRUF.

Since the veto of the appropriation for WRUF it has been exceedingly difficult to continue operation, and the fact that the license for the station has been retained is nothing short of a miracle. Within a period of thirty days WRUF had to change from a state supported station to a commercial station. The staff was reduced to one-third of its normal size, salaries were reduced, and equipment became obsolete as the station was forced to operate on a bare pittance. It was necessary to curtail many of the activities of the station. Instead of presenting educational programs and operating on a cooperative basis, the station had to present commercial programs and enter the competitive field. Instead of advertising the advantages of the State of Florida, it had to advertise privately owned products which were for sale. Many of the services formerly performed for the public were necessarily eliminated. However, the high standards of WRUF as an educational station have been maintained and it is still ranked as one of the most outstanding in the country.

The State of Florida should not relinquish the valuable asset it has in Radio Station WRUF, but every effort should be made to operate it again on state funds in order that it may be an independent and educational station and serve the people of Florida and the educational institutions of the State. Items may look rather large in the budget that is proposed for the station, but if consideration is given to the fact that our staff is much too small, our personnel work many hours overtime, salaries have been drastically reduced, and much modern equipment is needed, the budget is smaller than might be expected.

Respectfully submitted,

GARLAND POWELL, *Director*