

An analysis of the data by class of cattle reveals the highest proportion of fluke condemnations, 72 percent, was from bulls (Table 13). The next largest proportion was beef breed cows (68 percent) with the third largest group being dairy cows (59 percent). Beef breed steers had a 56 percent condemnation rate while 42 percent of heifers were condemned. About half the lots (54 percent of all cattle) were made up of several classes. These mixed lots had a 62 percent condemnation rate. A chi square analysis indicated there was a significant difference between the condemnation rate for beef cows and all other classes of cattle.

Examination of livestock source indicates that the vast majority of cattle slaughtered (probably 90 percent or more) were from central or southern Florida.

North Florida Auction Market Survey

Review of the survey results from Kaplan's slaughter plant indicated that a fluke prevalence might exist in northern Florida. Consequently, a survey was carried out to confirm the proposal. The approach taken was to have one laboratory technician collect manure samples and fill out a survey form at four North Florida auction markets for a five-week period during July and August, 1985. The manure samples were subsequently examined for the presence of fluke eggs. The technician attended a total of 13 market days over the period at the Gainesville, Lake City, Chipley and Graceville auction markets.

Producers bringing mature cattle to market were approached by the technician who requested permission to collect manure samples. There was only one refusal. Two to three samples were collected per transport unit. The same survey form used in the five-county southern Florida survey was completed by direct interview.

A total of 225 transport units was surveyed (including 20 from Georgia and Alabama) of which 9 were positive for the relatively harmless rumen fluke, 1 for the true liver flukes (*fasciola*) and 5 for both (Table 14). Ranches and farms infected with liver flukes were located in only five of the 27 counties from which cattle originated: Flagler, Okalusa, Seminole, Suwannee, and Washington (Map 2).

One of the survey questions involved producer estimation of whether he/she thought flukes were present on his/her farm. There were only two producers (1 percent of the sample) who believed they had flukes while 106 (or 47 percent) of the respondents indicated they didn't know (Table 15). Twenty percent felt they did not have flukes. One of the two producers who believed liver flukes were present tested positive while the other was negative. There were only nine producers who treated for flukes, two each in Columbia and Holmes counties, and one each in Flagler, Levy, Hamilton, Putnam, and Suwannee counties. The technician and a county agent visited 7 farms suspected of having flukes in August in Union and Columbia counties and collected samples. None of the samples tested positive.

Table 14. Prevalence of flukes in north Florida from 1985 survey.

| County | Farms tested | Positive for | | |
|------------|-----------------|----------------------------------|-----------------------------------|------|
| | | Paramphistomes (rumen flukes) | <i>Fasicola</i> (liver flukes) | Both |
| -number- | | | | |
| Alachua | 19 | 1 | - | - |
| Bradford | 4 | 1 | - | - |
| Columbia | 17 | 1 | - | - |
| Flagler | - | - | - | 1 |
| Gadsden | 1 | 1 | - | - |
| Jackson | 17 | 1 | - | - |
| Okalusa | - | - | 1 | - |
| Putnam | 5 | 1 | - | - |
| Seminole | - | - | - | 1 |
| Suwannee | 22 | 2 | - | 2 |
| Washington | 18 | 1 | - | 1 |
| Subtotal | 103 | 9 | 1 | 5 |
| Others | 122 | - | - | - |
| Total | 225 | 9 | 1 | 5 |