

MANAGEMENT OF FERAL HOGS IN FLORIDA--PAST, PRESENT, AND FUTURE¹

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Questionnaire surveys by Hanson and Karstad (1959) and Wood and Lynn (1976) show that Florida and Texas together contain two-thirds of the feral hog (Sus scrofa) range in the southeast. A similar survey of Florida Game and Fresh Water Fish Commission personnel and private and federal foresters (Frankenberger and Belden 1976) indicated that feral hogs occur in 66 of the 67 counties in Florida. In order to better understand the management problems for the feral hog it is necessary to review their past history and management in Florida.

PAST

When Christopher Columbus made his second voyage across the Atlantic Ocean in 1493, he carried sheep, goats, cattle, horses, and eight hogs to be released on the islands in the West Indies to become a food source for future voyagers (Towne and Wentworth 1950:70). In May 1539, when Hernando de Soto landed at the mouth of Charlotte Harbor, on a point not far from modern Boca Grande, Florida, he had with him thirteen sow hogs, probably descendants of those introduced by Columbus, which he had obtained from Cuba. In April of the following year de Soto's thirteen hogs had increased to approximately three-hundred (Towne and Wentworth 1950:73-74).

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The second introduction in Florida was in 1565, when Admiral Pedro Menendez landed with four hundred head as well as sheep and horses. A century later eight large towns, seventy-two missions, and two royal haciendas possessed descendants of these pigs. These hogs ultimately came in the hands of Indians who let them roam the woods where they were hunted. During this time escaped swine flourished and gradually spread north (Towne and Wentworth 1950:77).

During the early settlement of Florida, settlers raised swine under semi-wild conditions. Their hogs ran at large most of the time, and were rounded up at infrequent intervals. The law required the cutting of holes and/or slits in different arrangements, in a hog's ear, and the registering of this mark in the town clerk's office. Not only did this help settlers to identify their hogs, but the law forbade the sale of any carcass from which the ears were missing (Towne and Wentworth 1950:105).

PRESENT

Today, feral hogs are considered to be livestock by some and exotic wild animals by others. Where permitted feral hogs are still managed as private livestock. The U. S. Forest Service considers them to be private livestock and regards them as trespassers on national forests. As an exotic, the feral hog is regarded as a pest species by the Department of Natural Resources and as a game animal by the Florida Game and Fresh Water Fish Commission.

The ear marking or "hog claim" system was commonly practiced in Florida through the late 1940's. In 1949, the Legislature enacted laws (Sections 588.12 to 588.26 Florida Statutes) which were designed to prevent the roaming or running at large of "all animals of the equine, bovine or swine class including goats, sheep, mules, horses, hogs, cattle or other

grazing animals" upon those roads or highways in each county of the state which "are or may be maintained by the State Road Department, including the full width of the right-of-way" (Letter to W. H. Wells, Sheriff, Flagler County from Richard W. Ervin, Attorney General, October 9, 1950). Later legislation (Section 707.01 and 707.05, Florida Statutes) indicated the desire of the Legislature to make those animals that were not properly marked and fenced subject to public sale (Letter to Dr. O. E. Frye, Jr., Director, Florida Game and Fresh Water Fish Commission from Kenneth F. Hoffman, Assistant Attorney General, March 4, 1974). Because of this legislation, the State of Florida no longer regards traditional hog claims to be valid; however, they are still considered valid in certain counties where an arbitrary agreement has been reached by the county commission, county judge, and the sheriff's department.

Where hog claims are still honored by local officials, particularly in parts of Dixie, Baker, Columbia, and Wakulla Counties, ear marking is no longer commonly practiced, but rather the "hog claim" denotes an individual's claim to ownership of all unfenced hogs on a particular parcel of land. These claims are managed primarily to provide hogs for family use or for sale. Under this system, adult sows are left for breeding stock and boars are trapped (usually in late winter or spring), castrated and released. In the fall, with a good mast crop, the hogs are in better condition and are hunted or trapped. Some hog claim owners sell boars to hunting preserves in northern states or charge clients for hog hunting privileges on their claim.

On the three National Forests in Florida (Apalachicola, Ocala, and Osceola) which comprise more than 1,000,000 acres, the U.S. Forest Service considers feral or free ranging domestic hogs as privately owned livestock.

They have established a general policy that these animals, whether marked or not, do not belong on National Forest lands (Letter to Dr. O. E. Frye, Jr., Director, Florida Game and Fresh Water Fish Commission from Edward P. Cliff, Chief, U.S. Forest Service, December 6, 1966). The main reason the Forest Service considers hogs to be undesirable is the "substantial" damage to other resources because they: "are in direct competition with wildlife species by consuming quantities of acorns and other foods that should remain available for deer and turkey during the critical winter period; destroy turkey and quail nests; destroy young pine seedlings by rooting, and by eating the tender roots and cambium layer; damage forest roads by rooting and destroying vegetative cover on road shoulders, ditch lines and back slopes; can be dangerous to motorists and recreationists; are annoying to many recreation users and do extensive damage to developed recreation areas" (Letter to all suspected hog owners on the Apalachicola National Forest from U.S.D.A. Forest Service, National Forests in Florida, Tallahassee, December 10, 1968). For these reasons they have been working toward the elimination of feral hogs from all National Forest lands.

The Forest Service issues notices to all suspected hog owners within or surrounding a particular area, advising them to remove any feral hogs to which they may lay claim. After a reasonable amount of time, all hogs captured on the Forest are impounded, and the owners can regain possession only by paying an amount equivalent to the expense incurred in advertising, gathering, impounding, and feeding the hogs. All impounded hogs not claimed within five days are sold at public auction. If any are not sold at auction, they are sold at a private sale or condemned and destroyed (Notice of intention to impound trespassing hogs-signed by R. J. Riebold,

Forest Supervisor, National Forests in Florida, Tallahassee, December 9, 1968).

The Florida Division of Recreation and Parks, Department of Natural Resources, presently controls 219,313 acres of upland and 73,673 acres of submerged lands on 119 different sites in Florida. Nine of these areas, which total 89,717 acres of forest land, contain feral hogs. The Department of Natural Resources considers these animals to be pests and their major management objective is to remove them.

The main approach used in eliminating feral hogs from State Park lands is trapping conducted primarily by the Florida Game and Fresh Water Fish Commission, with the trapped hogs being removed to public hunting areas. However, the Department of Natural Resources presently feels that the trapping program has done very little to accomplish its objective and that it has merely served as a source of feral hogs for hunting. They feel that this problem has been intensified, particularly at Myakka River State Park, due to hogs being classified there as game animals. This classification was established by the Commission in 1964, at the request of the Department of Natural Resources, for the purpose of preventing trespassers from entering the parks looking for "their" wild hogs.

DNR's present position is that "hogs should not be classified as game animals since this gives them a higher status than a pest species should have, and Park personnel should be able to shoot rogue hogs or those that evade trapping" (Letters to Dr. O. E. Frye, Jr., Director, Florida Game and Fresh Water Fish Commission from Ney C. Landrum, Director, Division of Recreation and Parks, August 7 and October 16, 1973, and August 2, 1976).

The present Florida Game and Fresh Water Fish Commission was first established in 1943 by a constitutional amendment referendum in the

general election of November 3, 1942. This constitutional amendment, Article IV, Section 30 of the Constitution of the State of Florida, established a Game and Fresh Water Fish Commission with five members appointed to serve five-year terms, and having the power to fix bag limits and regulations.

The Florida Game and Fresh Water Fish Commission has developed one of the largest public hunting area programs in the United States in the form of 48 wildlife management areas comprising over five million acres of land. These areas have been made available to hunters by various lease agreements between the Commission and private landowners, other state agencies, the U. S. Forest Service, and military bases. The management areas are the basis for the management of feral hogs as game animals in Florida.

In those areas in which hogs have lost their legal status as domesticated, are no longer identifiable as private property, and where they offer a potential to the hunters of the state, the Commission is attempting to establish them as game animals. The Commission is influenced in many of its actions by public opinion. It has become Commission policy to designate feral hogs as game animals only in those areas where the public has shown an interest, where the land owners are agreeable, and upon receipt of a resolution from the County Commission recommending this action. Due to the interplay between today's regulations and yesterday's customs, this transition of hogs from private property to game animals has been affected with considerable less difficulty on wildlife management areas than in counties at large.

Wild hogs were first declared game animals in the J. W. Corbett, Eglin Field, and the Everglades Management Areas during 1956. Since then, feral hogs have become game on 35 wildlife management areas, three State Parks, two entire counties, portions of four other counties, one

State wildlife refuge, and a private hunt club management area (Figure 1). Public hog hunting is also allowed on the three National Forests although hogs have not been declared game animals there.

Management of wild hogs by the Florida Game and Fresh Water Fish Commission consists primarily of setting hunting regulations and relocating hogs from areas where they have become a nuisance, mostly from state parks, to public hunting areas. Under present hunting regulations, wild hogs may be taken only during the open deer season (generally from mid-November through the first weekend after New Years). Either sex is legal, but hogs less than 15 inches high at the shoulder are protected. The bag limit is one per day and two per season.

The major problem encountered by the Commission on many wildlife management areas has been the inability to maintain hog populations in the face of heavy hunting without re-stocking (Figure 2). Several regulations have been tried in an attempt to prevent depletion of hog populations, including: 1) shortening the season, 2) limiting the number of days dogs may be used to hunt hogs, 3) dividing management areas into "still" hunt and "dog hunt" zones and alternating these from year to year, 4) having only special hog hunts with dogs permitted and no guns, 5) setting a limit on the number of hogs to be harvested and closing the season when that limit is reached, and 6) the complete exclusion of dogs for the purpose of hunting hogs. These regulations have centered mainly around the use of dogs to catch hogs and have generally been successful only in those areas which contain an abundance of escape cover. At present, hog dogs are allowed on nine wildlife management areas, allowed only on portions of nine areas, and not permitted for the purpose of hunting hogs on 17 areas.

Several hundred hogs are live-trapped annually in the Commission's restocking program. Although this has been successful in developing hog populations on some areas, it has become a "put-and-take" system on several management areas. Hunting regulations established so far for some areas have not proved sufficiently restrictive to prevent the over harvest of hogs. Another problem is that release areas are sometimes determined more by distance, available time, and manpower than a real need for more hogs, and some of the management areas have been continually stocked unnecessarily to the point that they are probably overpopulated (Frank Montalbano, Florida Game and Fresh Water Fish Commission, personal communication). Experience has also shown that where the release area is mainly unsuitable habitat, hogs released within a few days of hunting season will widely disperse and not be available to hunters (Larry Campbell, Florida Game and Fresh Water Fish Commission, personal communication).

The cost of this program to the Commission has averaged from \$15 to \$30 per hog stocked depending on the locality and the capture method used (Memorandum to Commissioners and Commission Staff from Fred W. Stanberry, Director, Wildlife Management Division, Florida Game and Fresh Water Fish Commission, July 16, 1976). In one instance these figures were as high as \$25 to \$55 (Brady 1974). This year the hog trapping has been contracted to a professional hog trapper. Under this agreement the contractor traps, or catches with dogs, feral hogs on state parks and releases them in certain wildlife management areas. For these hogs, the Commission will pay \$10 per head for adults and shoats and \$2.00 per head for unweaned pigs.

FUTURE AND RECOMMENDATIONS

The Florida Game and Fresh Water Fish Commission has jurisdiction over wild animals, therefore, the Commission should eventually declare them to

be game animals Statewide with regulations which only allow for the harvesting of the huntable surplus. This would increase opportunities for public sport hunting and permit the discontinuance of an expensive and questionable restocking program which probably costs the sportsmen of the State more than they derive from harvesting the restocked animals. Without the restocking need, feral hog populations could be eliminated or controlled by other methods than just live trapping on those areas where hogs are considered pests and where hunting is not allowed.

Studies are needed on the basic biology of feral hogs, with particular emphasis on techniques for determining productivity and estimating harvestable surpluses, on the use of hog claims as a means of controlling hogs on those areas that cannot be opened to public hunting, and improved techniques for eliminating or controlling unwanted hog populations (Figure 3).

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Figure 1. Areas where the Florida Game and Fresh Water Fish Commission
has declared feral hogs to be game animals (1976-77).

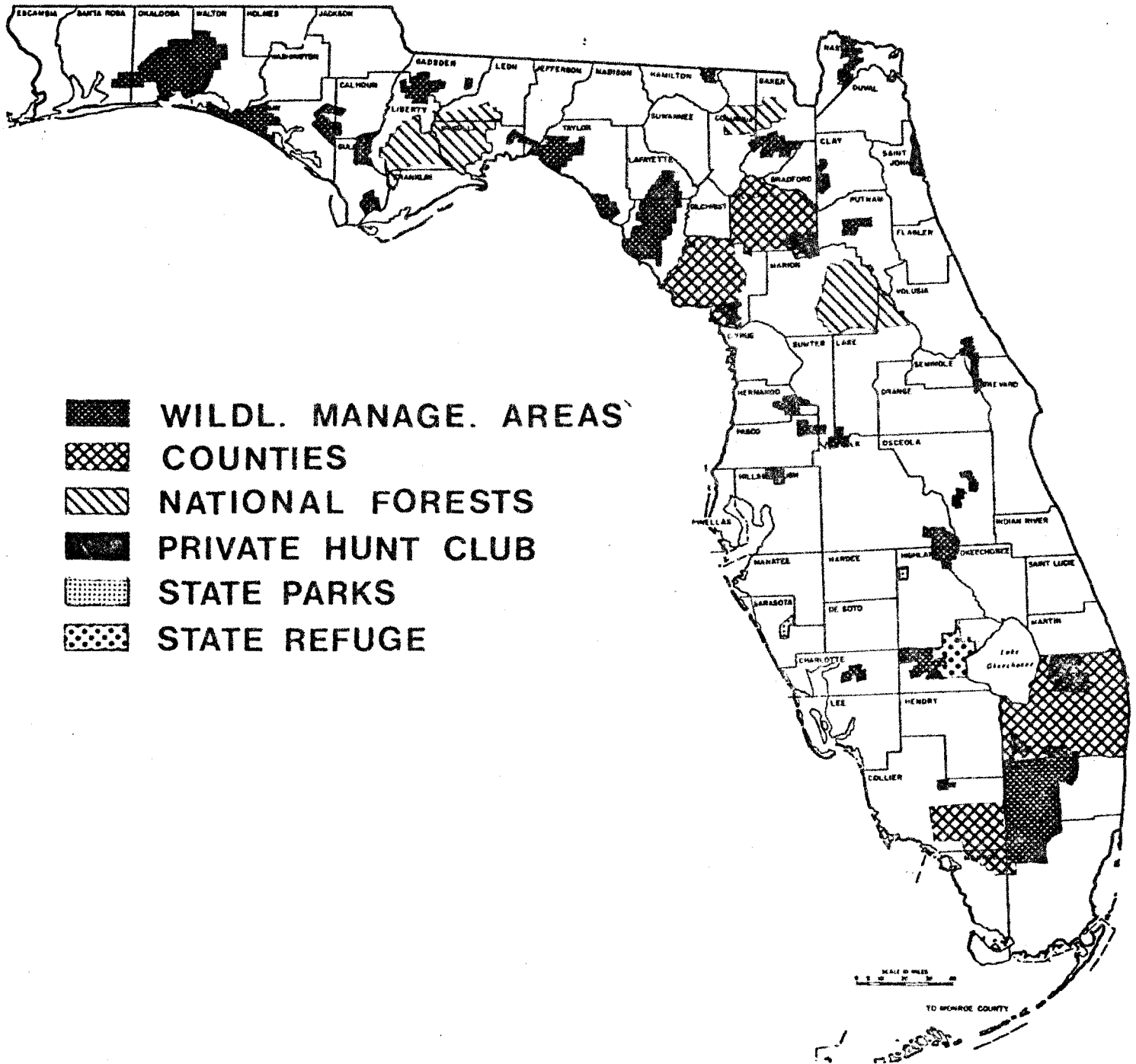


Figure 2. Numbers of feral hogs stocked and harvested from 1960 through 1976 on the J. W. Corbett Wildlife Management Area.

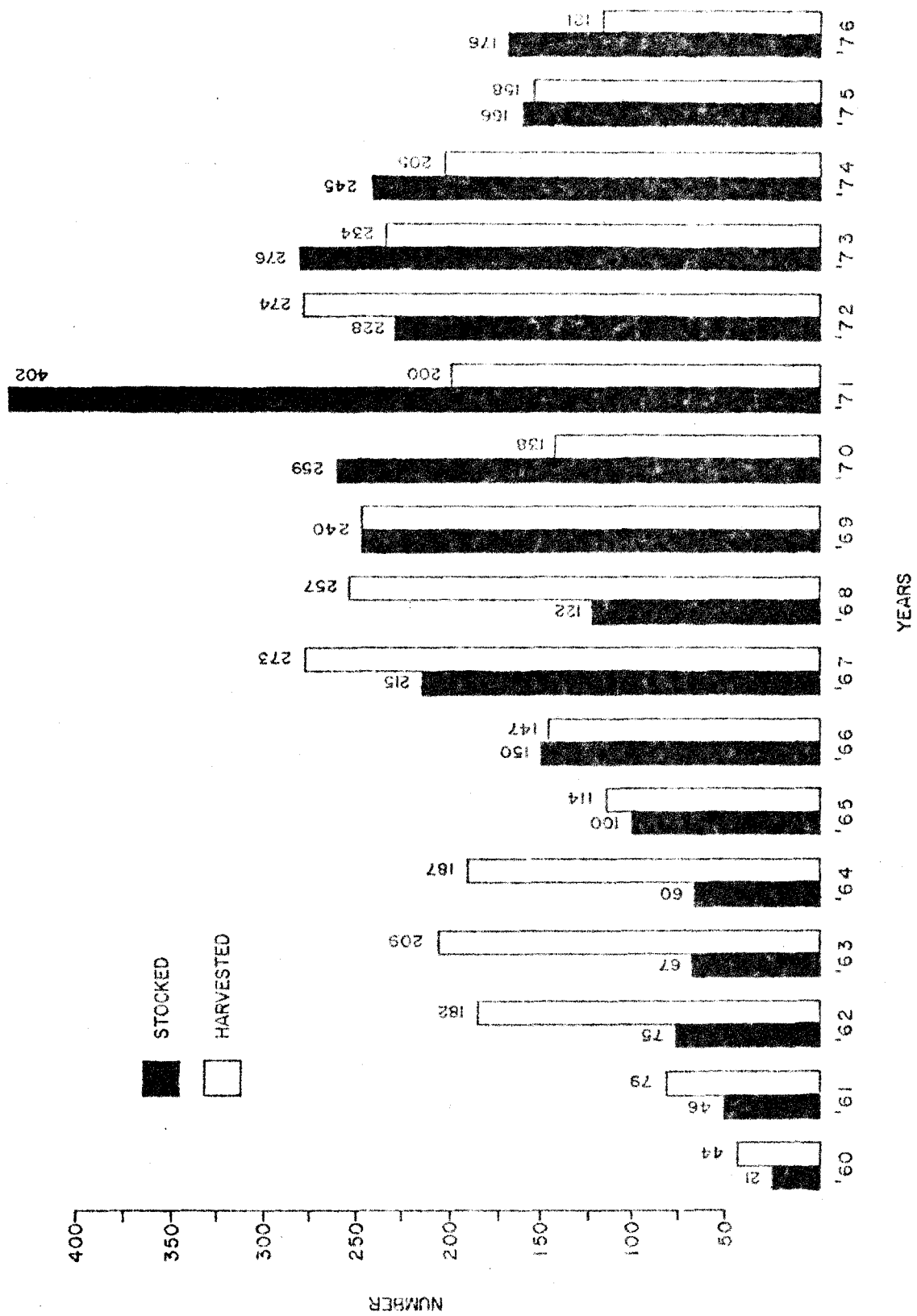


Figure 3. Proposed step-down plan for future hog management and research in Florida.

Manage feral hogs for the greatest utilization of the harvestable surplus for the most people where not in conflict with other land uses and eliminate or control populations where there is a conflict with other land uses

Manage feral hogs for the greatest utilization of the harvestable surplus for the most people where not in conflict with other land uses

Eliminate or control feral hog populations where there is a conflict with other land uses

Allow for the harvest of surplus feral hogs by the use of public hunting where feasible

Evaluate hog claims as a means of harvesting surplus feral hogs on those areas not open to public hunting

FGFWFC live trapping and direct reduction programs

Permits for other live trapping and direct reduction programs

Determine the maximum harvest the existing feral hog populations can produce while maintaining the breeding stock at a level where breeding success and survival of young are near the maximum

Develop and evaluate rules and regulations governing the public harvest of surplus feral hogs

Develop and evaluate techniques for eliminating or controlling feral hog populations

Survey County Commissions County Judges and Sheriff's Depts. as to their feelings on feral hogs and hog claims

Determine the number and location of hog claims

Develop and evaluate rules and regulations governing the private harvest of surplus feral hogs

Develop techniques for estimating feral hog population levels, breeding success and survival of young

Determine breeding success and survival of young at different levels of breeding stock