

# DuPre's Development is Invitation to Ducks

By JACK LELAND

Ducks and other waterfowl are flocking to feeding grounds which formerly were virtually useless salt marsh areas along the South Carolina coast.

Creation of fresh water waterfowl and fish ponds from alkaline salt lands is being done by two natives of McClellanville who decided that what the Southeastern Atlantic seaboard needed was more and better feeding grounds for waterfowl if the migratory waterfowl population was to increase.

What is probably the only such operation along the South Atlantic seaboard began nearly four years ago. James DuPre, a graduate engineer, had just returned from the China-Burma-India theater of war. With his brother Andrew, who then was superintendent of the Cape Romain Wild Life refuge, Cape Romain Contractors, Inc. was organized.

Today the company specializes in the construction, maintenance and planning of duck shooting areas and fish ponds. Its equipment ranges from tiny test-tubes used for testing water and soils to gigantic bull dozers, draglines and other engineering equipment. An unseen, but vitally important part of its equipment, however, is the biological and engineering "know-how" which the brothers possess.

One of the unique pieces of machinery is a "marsh buggy" used for plowing, of all things, salt marshes. Following several experiments, the DuPre's discovered that the salt marsh took several years to die after being flooded. By towing a conventional disc-cutter, the machine with "out-riders" easily moves across marsh and mud and cuts marsh growth into small pieces and causes it to die and rot when flooded instead of continuing to grow.

The first step in creating a duck or fish pond from salt marsh is to dike the area to prevent future invasions of salt water, the DuPre's said. Ideal locations are those where cedar hummocks or outlying islands form natural barriers, or where small creeks make indentations in the mainland. Along fresh water streams the problem is much simpler.

Following diking and installation of trunks or other drainage systems, the marsh is allowed to dry for a week or 10 days and then cut with the marsh buggy. Tests then are made on the water and soil inside the dikes for acidity and salinity.

All planting of duck food is based on these soil and water analyses. In brackish water it is necessary to insure a certain degree of salinity for the entire growing season since, if a brackish pond should become entirely fresh during mid-summer, all its vegetation would die. The same is true, in reverse, of entirely fresh ponds.

"Some of our finest duckmarshes are brackish. In planning and planting a pond it is first necessary to determine the acidity, salinity or neutrality of the water and soil. Plants adaptable to acid water conditions will not grow



FROM THIS—Andrew H. DuPre, of McClellanville, gives instructions to the operator of his "marsh buggy" on a salt marsh area near McClellanville. The machine, conventional Caterpillar tractor equipped with "out-rider" cleats, operates over marsh areas which barely will support a man walking. Towing a disc-cutter, the buggy chops the salt marsh into the mud, assuring quick rotting when the area is flooded for creation of a duck or fish pond. (Staff Photo by Gilbreth.)



TO THIS—Thousands of ducks take to the air from a duck pond several miles away from the area in the top photo. Thousands of such marsh areas exist along the South Carolina coast which are adaptable to similar waterfowl purposes. Cape Romain Contractors, Inc., of McClellanville, currently is creating waterfowl and fishing areas from several formerly salt marshes in the Lowcountry. (Photo by Hyder.)

under alkaline conditions, and vice versa," Andrew DuPre pointed out.

"Sometimes it happens that a duck marsh can be brought into full production during a single season," Andrew DuPre said.

While good results may be obtained in some cases within a year, the brothers said it usually took at least two years even with the best of equipment and knowledge. This is due to the fact that most waterfowl food plants are perennials, requiring about two seasons in most cases to obtain a maximum coverage.

"Actually, some entirely fresh areas can be brought to maximum produc-

tion in one season with annual plants. However, these are rather expensive to maintain from year to year because annuals generally do not have the capacity to crowd out obnoxious vegetations," they said.

Given a suitable location, with a drainage area and a certain amount of isolation, the DuPre brothers practically can guarantee duck-shooting in a very brief time. The company maintains near McClellanville a complete nursery stock of waterfowl food plants adaptable to the Southeastern Atlantic coast.

This includes such plants as widgeon grass, sago pond weed, banana water

lily, dwarf spikerush, bullrushes and others. In addition to creating new fishing and waterfowl areas, the company also conducts regular biological inspection services for such areas.

It's one of the Southeast's most unusual occupations and one which will do much to assure an increase in the duck population through the provision of adequate feeding grounds for the winter visitors, the brothers believe.