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Waterfowl Evaluation--Lake Ophelia/Grand Cote NWR's

ARD-Refuges and Wildlife, FWS, Atlanta, GA

A team of multiagency biologists overviewed the waterfowl management potentials of the subject refuges in 1990 (report attached). This memorandum summarizes the highest priority recommendations. Other important recommendations are in the main report, and they should help guide refuge waterfowl programs for at least the next 5 years.

## Highest priorities in descending order:

- 1. The priority objective(s) for the refuge should be management of a complex of habitats for waterfowl (flooded forest, natural ponds/lakes, moist-soil areas, grain crops, beaver ponds, winter water, browse, etc.). The overwintering strategies of pintails, teals, and mallards should be uppermost in mind. Additionally, these refuges should be capable of supporting geese (12,000 geese for 100 days), and an array of wading birds. (See main report section on Objectives.)
- Cooperative farming should continue to be a major component of the refuge's waterfowl activities. Some reduction in total agricultural acreage is appropriate, but this should proceed <u>carefully</u> over the next 5-6 years. Also, every effort should be made to maintain and maximize current rice bases.
- 3. At "least" 1,600-2,000 acres at Lake Ophelia should be retained in agriculture for at least the next 5-6 years. Most of the farming acreage will be south of the Grand Lake Road, but a farming unit (large and open enough to attract geese) should also be maintained north of the road.
- 4. At Grand Cote (Choctaw Unit), do not allow significant areas below Little California Road to go unfarmed for 5 or more years (loss of farm designation). Work with co-op farmers to provide additional wells to enable "movement" of rice farming activities. Utilize all approved methods (including chemicals) to keep plant succession and cockleburs under control.

- 5. Determine current contaminant/water quality conditions of bayous going through, around, and into Grand Cote refuge. Determine what data exists, who has it, and what it means. Assure that State's DEQ Division begins sampling Grand Cote water for contaminants (in FY 1990). Contact Fish and Wildlife Enhancement personnel to begin fish sampling to determine contaminant levels (FY 1990 and 1991).
- 6. Moist-soil management should also play a key role at each refuge. Maintain at least 4,000 acres at Lake Ophelia for the next 5 years, and at least 3,000 acres at the Grand Cote, Choctaw area (excluding the 1,300 acres of rice base).
- 7. Develop an interim farm plan for both refuges by December 1991. Develop an interim water management plan for the refuges by December 1991. Develop an interim reforestation plan by September 30, 1991, for each refuge (or by December of 1991 at the latest).
- 8. Water control structures and enhancement of water delivery systems are high priority (including portable pumps, sublevees, and new wells). Every effort should be made to ensure flooded habitats—especially in dry fall/winters. Maintain Unit A at Grand Cote (all north of Little California Road) in an open status by farming or moist—soil management for the next 5 years (Figure 1). Units F, E<sub>1</sub>, E<sub>2</sub>, south of Little California Road should also be managed for moist soil, but rotated with rice when feasible (especially Unit E<sub>2</sub>).
- 9. Proceed cautiously before reclaiming open areas to forested habitats. Annual prescriptions and proposed tree/seed planting sites should be presented for review to the associate manager, regional forester, and district biologist before proceeding. Existing potential GTR sites and future GTR sites should be considered to allow for access, future levees, openings, etc., "before" seeding/planting is initiated.

Explore the feasibility of GTR sites on Units K and I at Grand Cote (Figure 1) and Mouiller A'You (Hancock tract) at Lake Ophelia. Determine feasibility of creating GTR's from scratch on the now flat, farmed areas that are destined for future reforestation via direct seeding. For example, rice-terrace levees around or throughout one or more areas proposed for reforestation should be established or planned for--now while certain areas are still designated as farm sites.

- 10. Conduct waterfowl/migratory bird inventories as outlined in the main report.
- Work with local Levee Board to try and get timely canal water levels (Grand Cote) that could be useful as a source of water for flooding waterfowl habitat (assuming the waters test suitable for use). For example, the main Marksville structure (Figure 1) could possibly be manipulated to hold water levels as a source for gravity flow and/or pumping.
- 12. If water quality data/contaminant sampling provides evidence of suitable water, proceed to obtain the few remaining 200-plus acres of inholdings at Grand Cote (Choctaw site) and initiate acquisition of the catfish ponds at Grand Cote.
- 13. Priority should be placed on securing the following equipment/special actions:
  - o 4-WD tractor with disc and mower -- \$60,000 o Several portable pumps -- 30,000
  - o Deep wells at Lake Ophelia and
     Grand Cote, including power units -- 100,000
    o Sublevees/levee repair at Lake Ophelia -- \_\_\_\_\_\_
  - o Tractor trailer rig -- 80,000

## Other Important Recommendations (Descending Order)

- o Area C (northwest of Little California Road) should be developed into a deep-water permanent pond (if feasible).
- o Continue to manage for some moist-soil benefits in reforested areas.
- o For drawdown and flooding dates in moist-soil areas, plan for a variety and staggering of slow drawdowns/flooding to encourage germination and growth of preferred moist-soil plants. Consider some actions specifically for nongame birds expecially during peak migration dates. Utilize different treatments (discing, chemical, mowing, etc., plus water manipulation) to establish best management practices. Generally, the soil should be disced every 3 years to control woody vegetation. Develop and maintain a system of vegetative transects, measure plant responses, and keep good records (water levels, plants, waterfowl use).
- o Better water control at the Choctaw Unit of Grand Cote is desirable, not only to grow desired foods, but to also flood habitats in late fall and midwinter. Several action items not previously listed are:

Rehabilitate existing deep wells.

Determine feasibility of developing a water storage reservoir at Grand Cote (present map and report by February 1992).

Utilize farmers to obtain some wells, water-control structures, etc.

- o Alert appropriate academic/research institutions that opportunities are available to evaluate reforestation practices and monitor long-term successional trends on reclaimed bottomland sites.
- o Public use activities should be limited during key waterfowl use months (November-February), especially in the Lake Ophelia core area and sites south of Little California Road at Grand Cote. Fishing should not occur after mid-October and should remain closed to at least March 1. Very select, carefully controlled deer hunting and upland hunting could be allowed in certain portions of the refuge. Zoning by days of the week, hours of the day, and months of the year may be necessary to provide sufficient sanctuary and loafing areas for waterfowl.
- o The key to future waterfowl hunting will be refuge acquisition progress, response of waterfowl, and a future biological evaluation of the refuge's waterfowl hunting potentials. In the future, waterfowl hunting at Lake Ophelia NWR outside the "core area" south of Lake Ophelia and outside a smaller "core area" north of the Grand Lake Road should be considered. Potentials for waterfowl hunting at Grand Cote would be focused primarily to those areas north of Little California Road. The refuge manager should, however, proceed with drafting potentials for waterfowl hunting at each refuge by December 1991.
- o Wood duck banding should be pursued, including the erection of wood duck boxes to increase production and provide sites for the capture of nesting females.
- o Initiate several of the recommendations listed under <a href="Nongame Birds">Nongame Birds</a>, especially regarding the availability of some early water.

## Attachment

cc:

Lake Ophelia/Grand Cote NWR w/copy of report Sam Drake w/copy of report Ray Aycock w/copy of report 4

