

ISLAND-NESTING TERNS

MANAGEMENT ISSUES AND CONCERNS

Raised by Working Group November 8, 2006

The Working Group had a number of questions and identified a number of issues and concerns it considered important when developing goals and objectives for management of island-nesting terns.

Distribution

- 95% of all terns are on managed islands
- Are there potential islands for future restoration? (identify these)
- Terns are restricted in their ability to move to other sites if sites aren't available or suitable
- Can we identify islands to make additional space for terns (i.e. Jordan's Delight)
- Wooded Islands (can some be modified for terns?)

Management of Islands

- Can we move toward less intensive management? Current population is equivalent to a "zoo population" on intensively managed sites
- Need terns on unmanaged islands as well
- Can we "semi-manage" some islands – especially those with suitable habitat and historic use?
- Revisit Management recommendations for new restoration projects (check Roseate Tern Recovery plan)
- Vegetation Management is needed
 - Several examples on most restoration sites
 - Metinic (sheep grazing), PMI (burning), Stratton (Bittersweet removal)
 - Mustard (an invasive plant taking over some islands)

Management Away From the Islands

- What's going on away from the islands?
- Lack of knowledge on food sources
- Currently, we record food items but additional studies need to be done
 - Some telemetry would help identify foraging areas
 - What habitats do Roseate Terns use for foraging?
 - Marine radar technology may help in the future
 - Accuracy issues are a problem

Island-nesting Terns Issues and Concerns

- Could possibly pair with a telemetry study
- Could transponders be used to identify species or individuals?
- Diet – Why increase tern numbers if the food base isn't there?
 - Herring likely driving the system but Sand Lance seems to be increasing in diet – especially at Stratton Island
 - Shifts in diet.... Looking at condition and survival of terns
 - Effects when herring taken out. Scott Hall is looking at this
 - Need to work with DMR, etc. and improve communications
 - Consider establishing Marine Reserves around islands
 - Perhaps experimental lease?
 - Find good fishery spots - now and historically
 - Monitor status of local herring stocks
 - Think of food resources beyond the colonies
 - Look at dredging regulations and potential effect on Sand Lance or other important tern foods
- Importance of tern staging areas – especially for Roseate Terns
 - Prouts Neck, Popham, and Seawall
 - Think about managing these habitats for staging and pre-migration

Predation

- Predation occurs even well offshore
 - Mink
 - Gulls
 - Peregrines
 - Great Horned Owls
- Gull Control:
 - Is it still viable? Should we continue to use avicides?
 - Still some negative feedback
 - Lethal removal vs. “non-lethal” control
 - Laughing Gull populations need to be controlled

Other Concerns and Issues

- Contaminants and Disease – what are their affects?
- Research and Management hindered by a lack of dedicated funds
- Need to look at population of Common Terns that nest at inland sites
- Other potential limiting factors
 - Wind Power
 - Coastal Development (oil/gas)
 - Climate change (ocean currents, spring rains)

Issues to be addressed in the Island-nesting Tern Management System

- Technique to measure productivity
 - Standardize Maine vs. Roseate Tern recovery measure of productivity
- Do an evaluation of the 70 or so islands with a recent record of terns to determine if the habitat is still suitable for terns
- Will need an explanation as to why we selected the population objectives that we did...old way 1930's levels...higher now for Common Terns
- Habitat Objective – somewhere, address island acquisition
- Productivity benchmarks – Foraging studies