Long-Term Bird use of the Craney Island Dredged Material Site
In Portsmouth, Virginia 1974-2005

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Introduction

• Craney Island, Portsmouth, VA - An ever changing and dynamic site
• Long-term monitoring project (since 1974)
• Avian utilization of site (Nesting, Migrating and Wintering)
• Major threats to the birds
• Uncertain Avian Future at Craney
Wading Birds and Waterfowl
Shorebirds
<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>1988</td>
<td>Initiated Bird Habitat Management Effort --- Led to the Establishment of Appropriate Least Tern Nesting Habitat</td>
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<tr>
<td></td>
<td>- Corps Created Sites</td>
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<td></td>
<td>- W&amp;M Decoyed Least Terns to 3 of 5 sites</td>
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<tr>
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<td>- Strong Public Outreach Effort Initiated</td>
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<td>1989</td>
<td>First Pair of Nesting Piping Plovers led to a Management MOU Between Corps and W&amp;M</td>
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<td>1989 - Present</td>
<td>Close Cooperation with Periodic Planning Meetings</td>
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Current Major Threats and Concerns

- Changing Habitat
- Avian and Mammalian Predation
- Human Disturbance
- Flooding
Least Tern Nest Sites – Change from Year to Year

Note – Three Year Cell Rotation for Dredge Operations
Create Habitat with Appropriate Substrate
Vegetation Control
Least Terns on Territory
Typical nest at Craney Island at Prepared Site
Newly Hatched Least Tern
Least Tern with Prey

Photo by Jim Zingo
Least Tern Adult Count at Craney Island
1975-2005
0.88 Least Tern Fledged Young/Nest in 2005
Piping Plover Nesting on Craney 1989-1997
Continual Change / Disturbance
Nesting Areas Posted and Closed During Breeding Season
Buffer Zones

Keep Out Sign

Buffer Zone
Continuous Dredging Operations
Dredge Material Operations and Nesting Birds Can Co-exist
Managing Cells for Nesting, Migrating and Wintering Species

Habitat Creation
Depth of Water
Vegetation Control
Red Fox Primary Predator
Avian Predators
Avian Predation
Current Management Approach

• Yearly Joint Planning Session with Corps
• Create Suitable Habitat for Beach Nesting Species.
• Maintenance of Sites.
• Identify / Post / Protect All Active Sites.
• Frequent Monitoring.
• Predator Management.
• Weekly Report / Recommendations to On-site Management
<table>
<thead>
<tr>
<th>GOOD:</th>
<th>Created Habitat Works – Maximum of 287 Pairs of Nesting Least Terns; 5 Pairs of Nesting Piping Plovers</th>
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<tbody>
<tr>
<td>BAD:</td>
<td>Foxes, Feral Cats, Wild Dogs Destroyed Nesting Birds</td>
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<tr>
<td>UGLY:</td>
<td>Greater than Half of Shoreline Foraging Area Lost to Plovers by Installation of Rip Rap</td>
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<tr>
<td></td>
<td>Increased Dredging Operations Adversely Impacting Previously Successful Nesting Sites</td>
</tr>
</tbody>
</table>
Uncertain Avian Future at Craney

Mammalian Predation – Outlook Bleak Unless Neighboring Facilities Actively Control Foxes, Feral Cats and Dogs

Increased Dredging Requirements - The Continuous and Simultaneous Use of All Three Cells will Negate the Management Strategy Employed since 1988

Future of Craney Island for Avian Use is Uncertain – Facility may be Enlarged or may be Converted to Other Uses

* New Management Strategy Under Development *
Acknowledgements

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