





Photo by Jackson Hill

Rabbit Island Adaptive Management and Performance Monitoring

CPRA Board Meeting, SOWELA Regional Training Center, Lake Charles, LA 10/21/26

Marsh Restoration Lessons Learned









Targeted Investments

- **Generate real-world guidance** for ecosystem project restoration teams
- **Create**, **restore** and **manage** habitats that directly benefit coastal nesting birds
- **Develop** comprehensive, rigorous, and repeatable monitoring methods …

- Easily convey benefits achieved (***Emphasis on General Public***)
- Inform stakeholder decision making

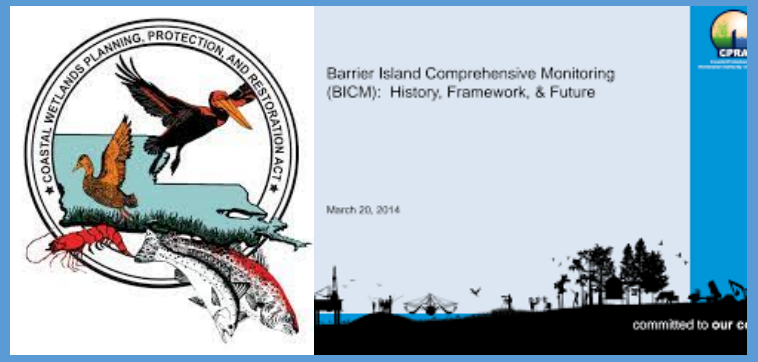


Closer to home

These **investments** …

Bolster LDWF's capacity to **restore, conserve and manage** Louisiana's diverse and geographically-expansive avian resources

Integrate within CPRA's **key initiatives…** to **address today's issues …** and **promote tomorrow's solutions.**







Ongoing Accomplishments

Rabbit Island

- Very limited available CWB nesting habitat (prevalent nest inundation)
- **Completed: 2021**
- **88 acres**: Shrub and select ground-nesting birds (**82 ac**) and nourishment (**6 ac**)
- Maintained existing preferential habitat features
- Plantings and grasses







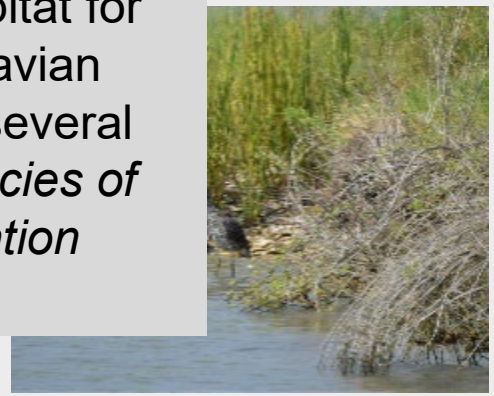








Critical nesting habitat for **over 60 different** avian species including several designated as *Species of Greatest Conservation Need*



Louisiana State Wildlife Action Plan





Adaptive Management
















2,500 LF
Rabbit Island
Rabbit Island Point
2021



Productive Partnerships

In 2023, Partners played a critical role towards installation of a targeted protection feature (2,500 LF) on Rabbit Island's E / NE shoreline.

Real World Benefits

- Significantly erosion reduction
- Promoting land accretion
- Creating new bird nesting and foraging opportunities
- Resulting in significant nesting performance!!!



Total Nests: 23,276 (2024)

Louisiana Trustee Implementation Group (LATIG)

CHENIERE

The Nature Conservancy

New Challenge

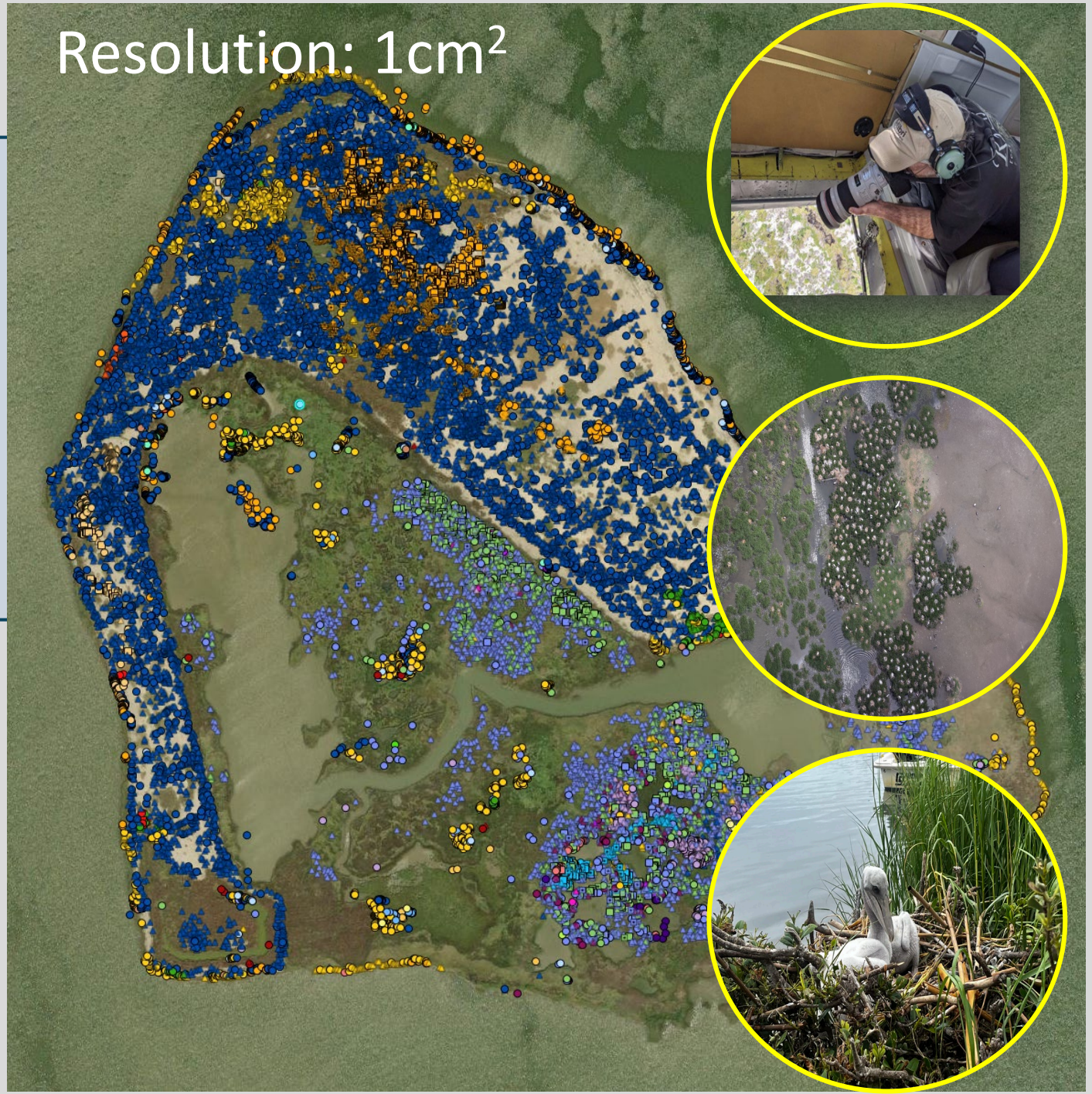




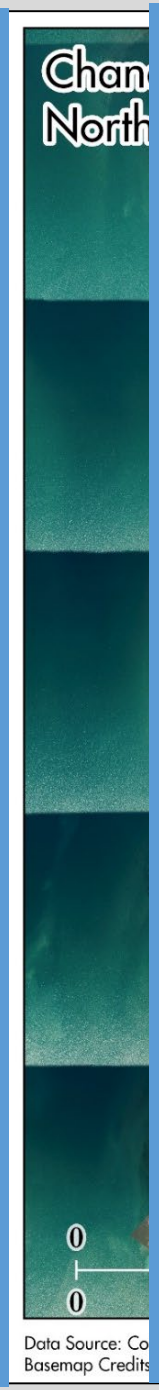


Performance Monitoring

- Document **individual** and **coastwide** CWB performance
- Document CWB **habitat utilization**
- Inform future **project design and construction**
- Inform need and effectiveness of **adaptive management strategies**
- Facilitate Trustees' ability to **easily convey restoration benefits**



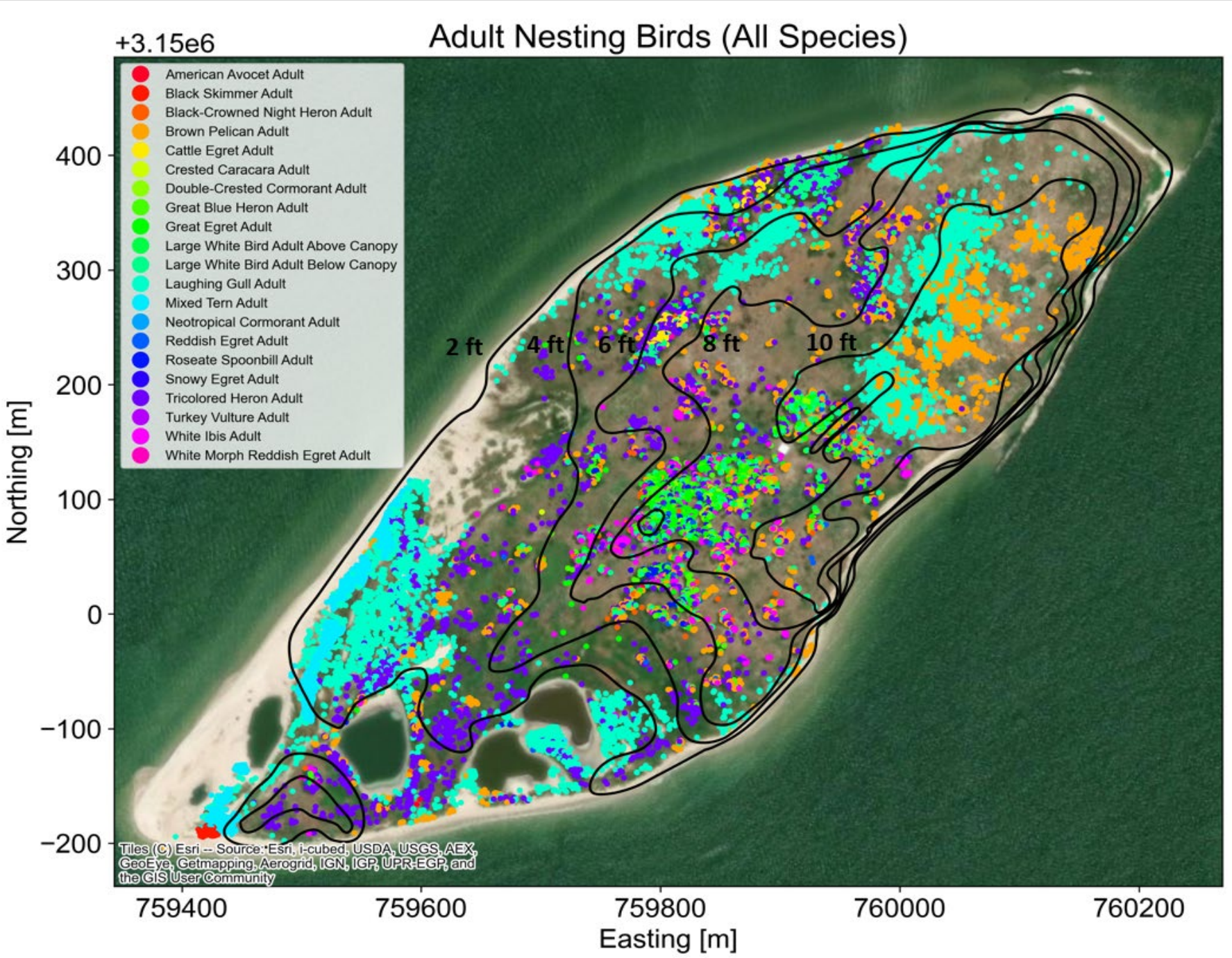
Chandeleurs, Breton NWR, LA



Raccoon Island, Isle Dernieres, LA



Chester Island – Matagorda Bay, TX



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- Document **individual** and **coastwide** CWB performance
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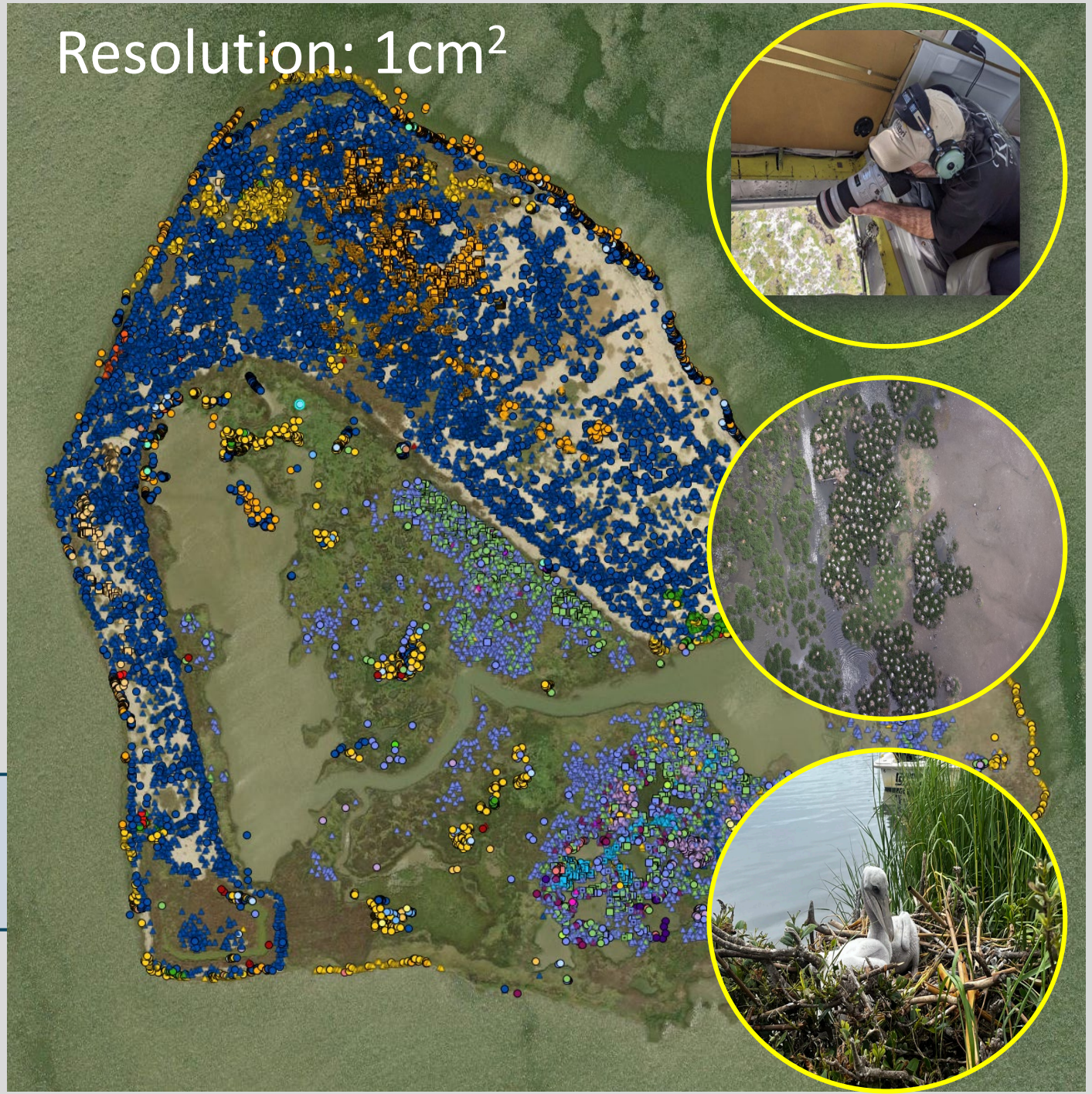


Easily Convey Restoration Benefits

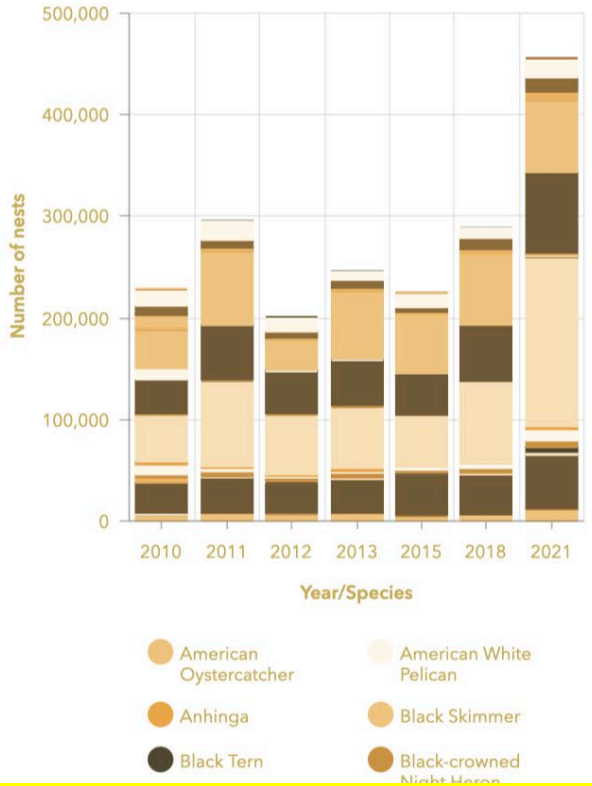
AVIAN DATA MONITORING PORTAL

Project Information | Data Management | Dashboard | Data Explorer | Survey Protocols | Dotting Protocols

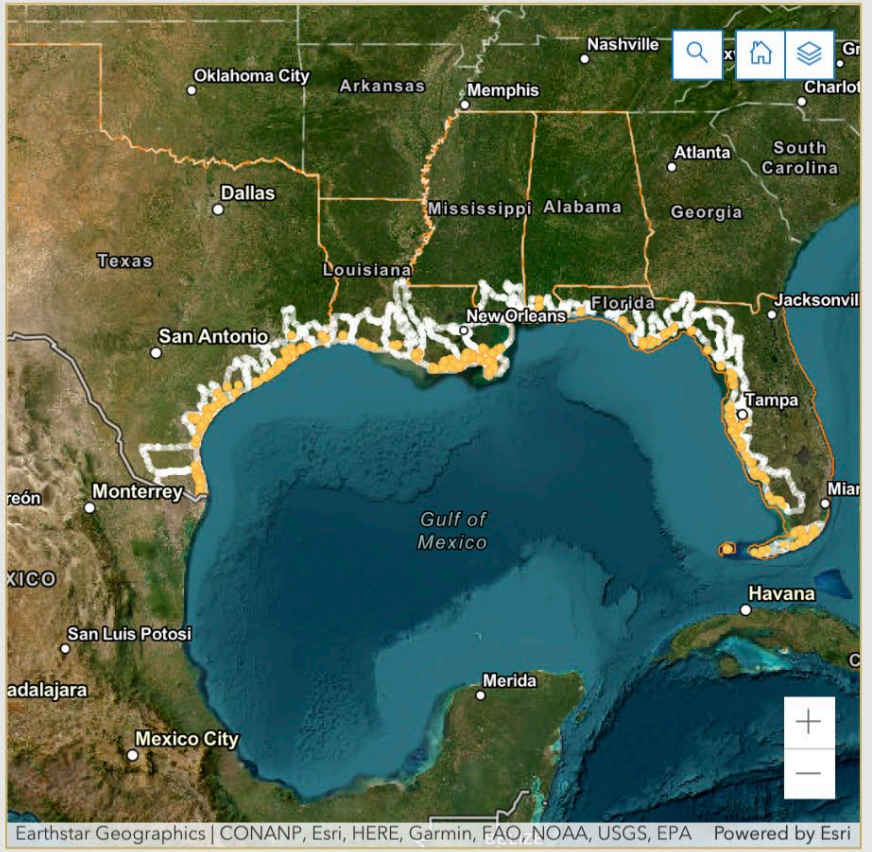
Filters

- Year: All
- State: All
- GeoRegion: All
- Colony: All
- Species: All
- Watershed (HUC8): All

Total nests observed



Total nests | Total birds



Photos

Survey date: 6/10/2010
Colony: 3 Rooker Key
Species: White Ibis
Number of birds: 24
Number of nests: 24
Links
High Resolution Image
Screenshot Image



Survey date: 6/10/2010
Colony: 3 Rooker Key
Species: White Ibis
Number of birds: 71
Number of nests: 66
Links

Those are the first 50 photos that meet the selections made. If you are looking for a specific photo, please modify the filters.

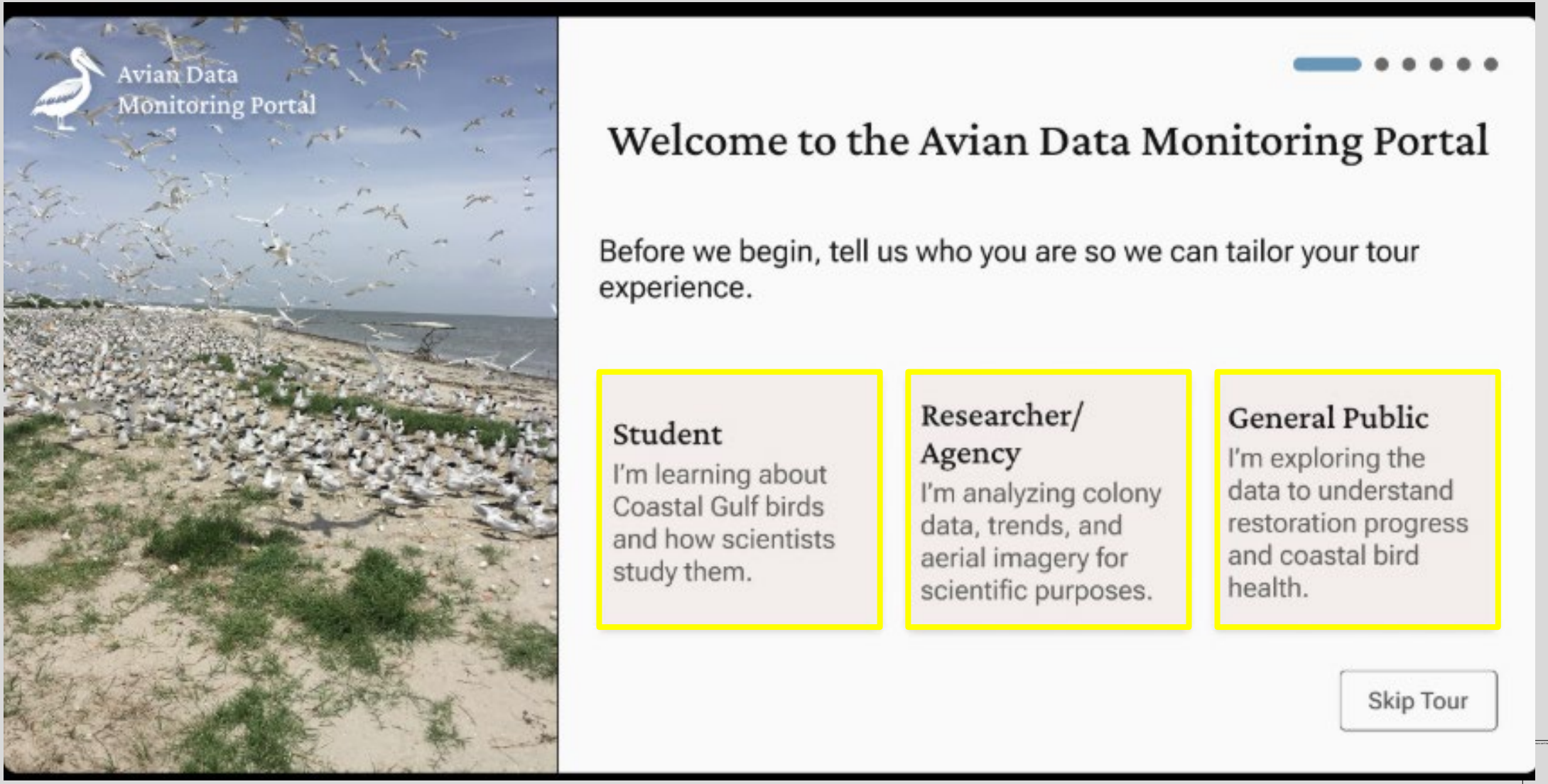
Total birds observed

2,583,839

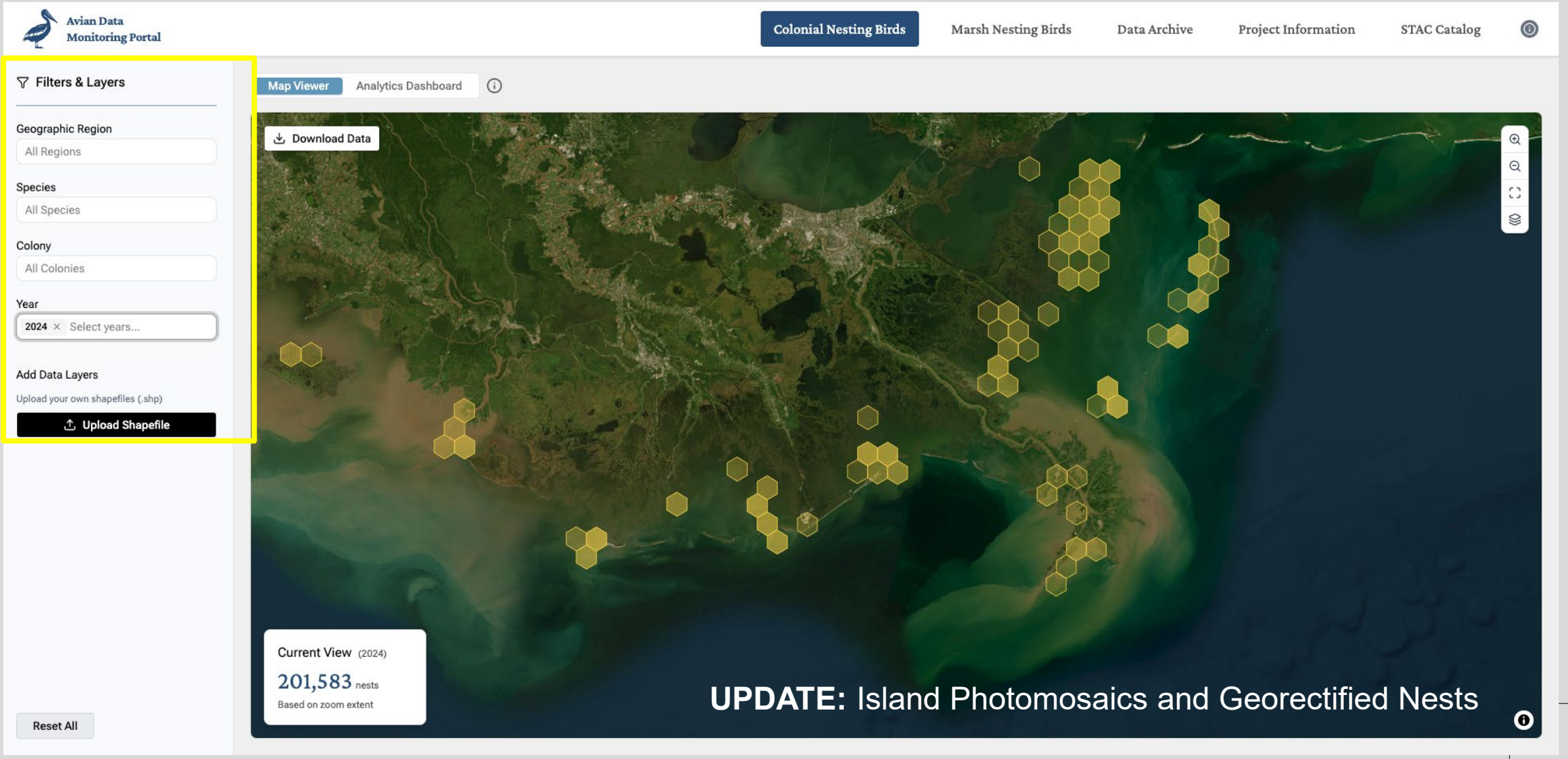
Note:
The total number of nests or birds observed displayed on this dashboard are calculated using a formula based on the survey year and counting categories used. For a detailed explanation of how these

https://avianmonitoring.com

PORTAL UPDATES (2027)



PORTAL UPDATES (2010 TO CURRENT)



Marshbirds





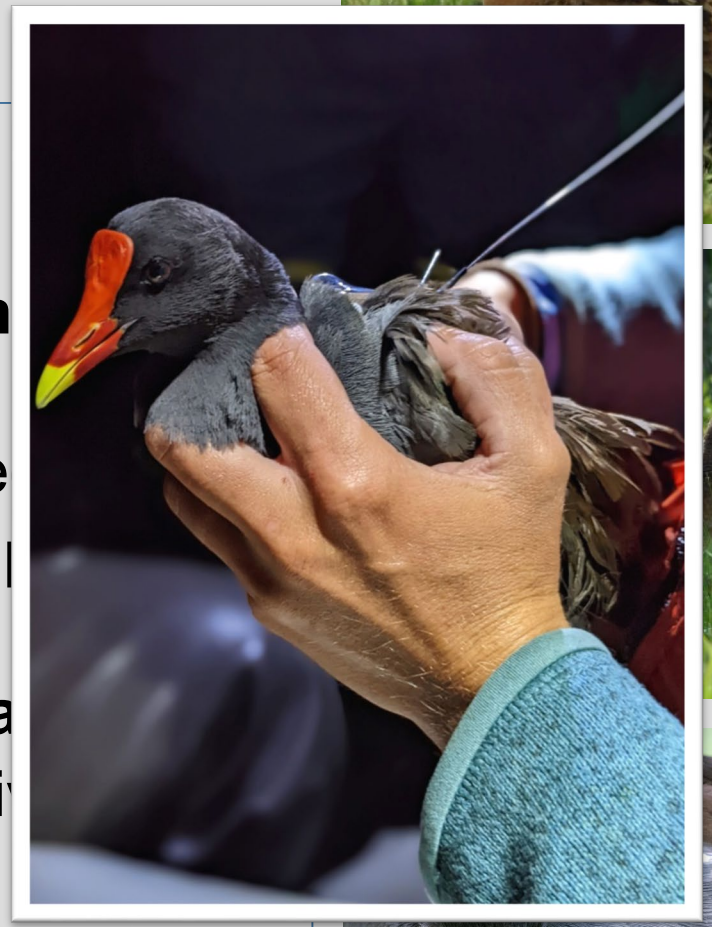


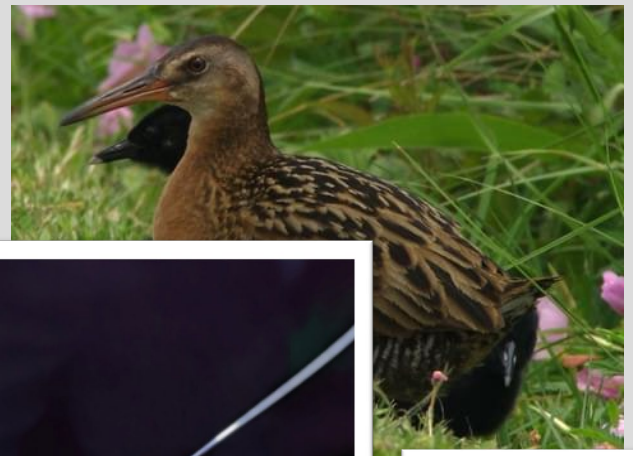


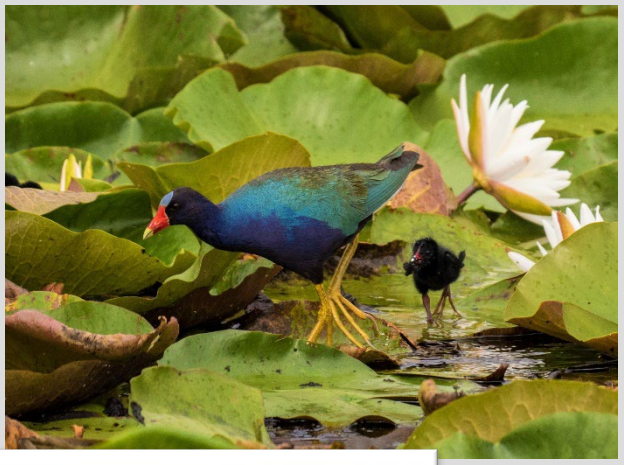
Multi-Year Evaluation

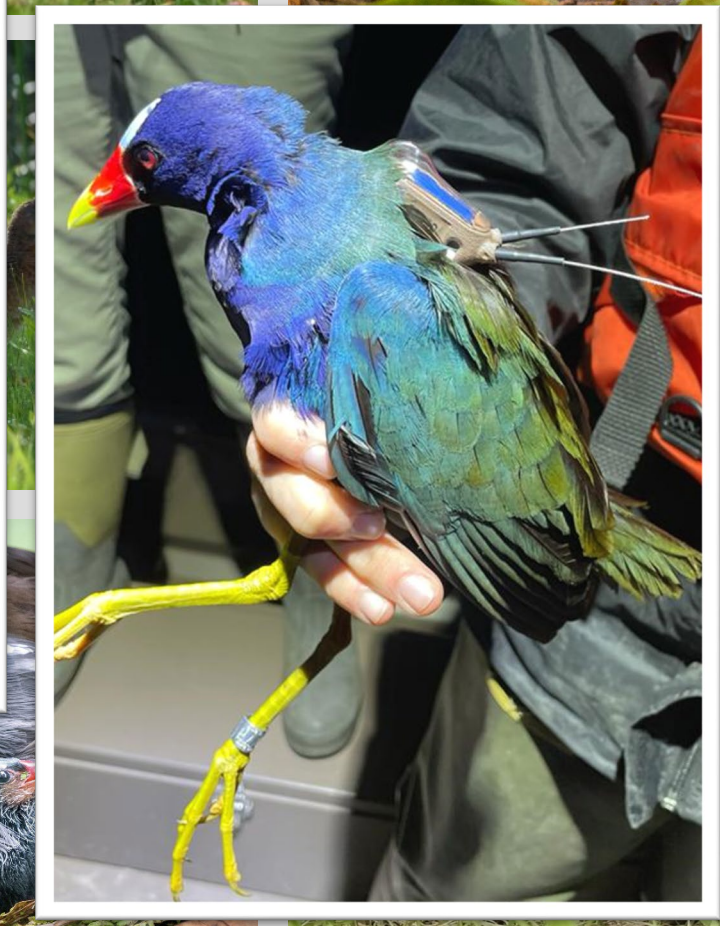
- **Population estimates**
- **Mu** **on**
- **De** **de** se **n**
- **Id** **ea** fut **oti** ma









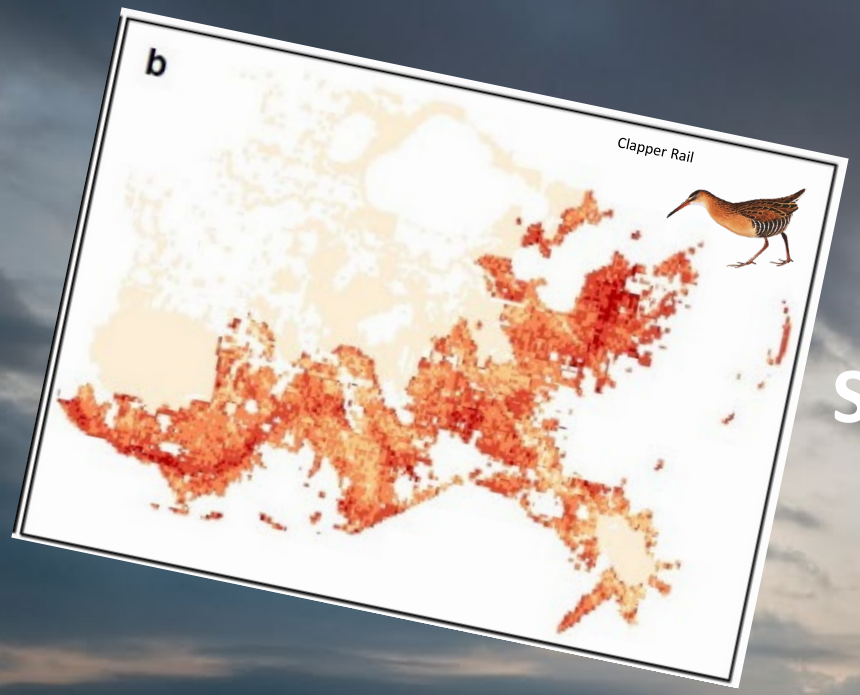




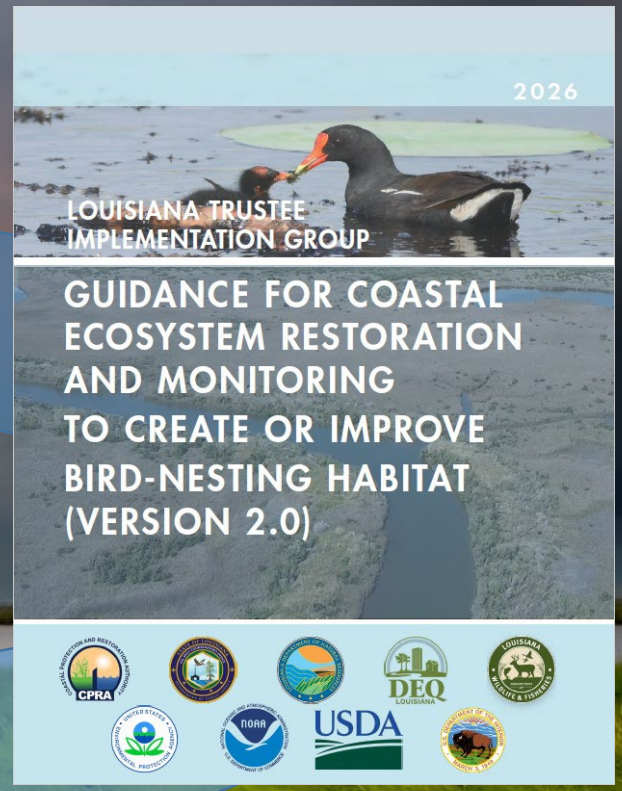


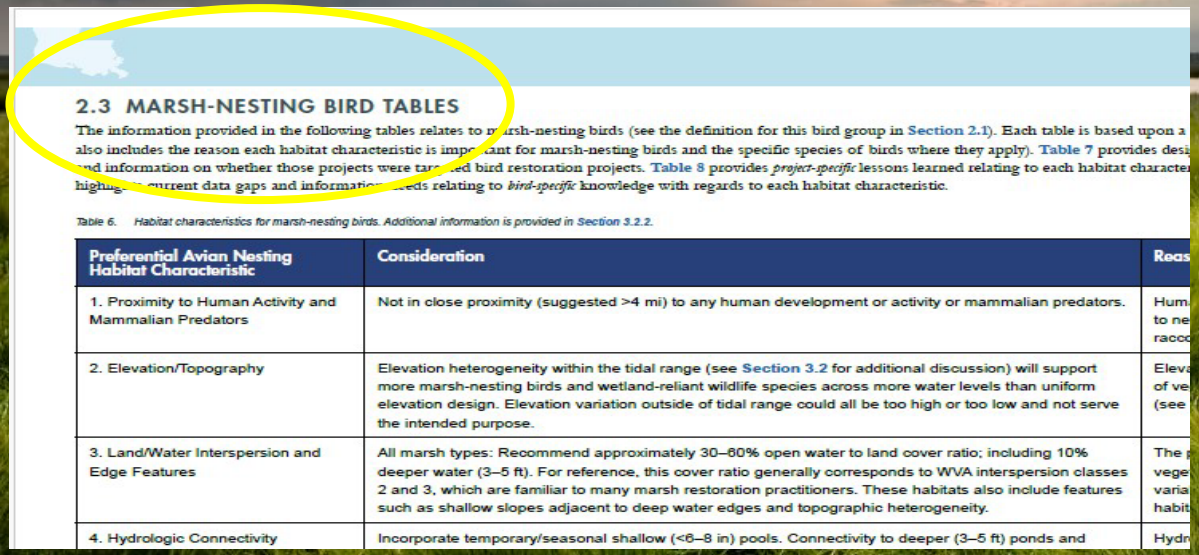
Multi-Yea … 4 coastal basins

Marsh-Nesting Bird Update



Species Distribution Models & Abundance Estimates





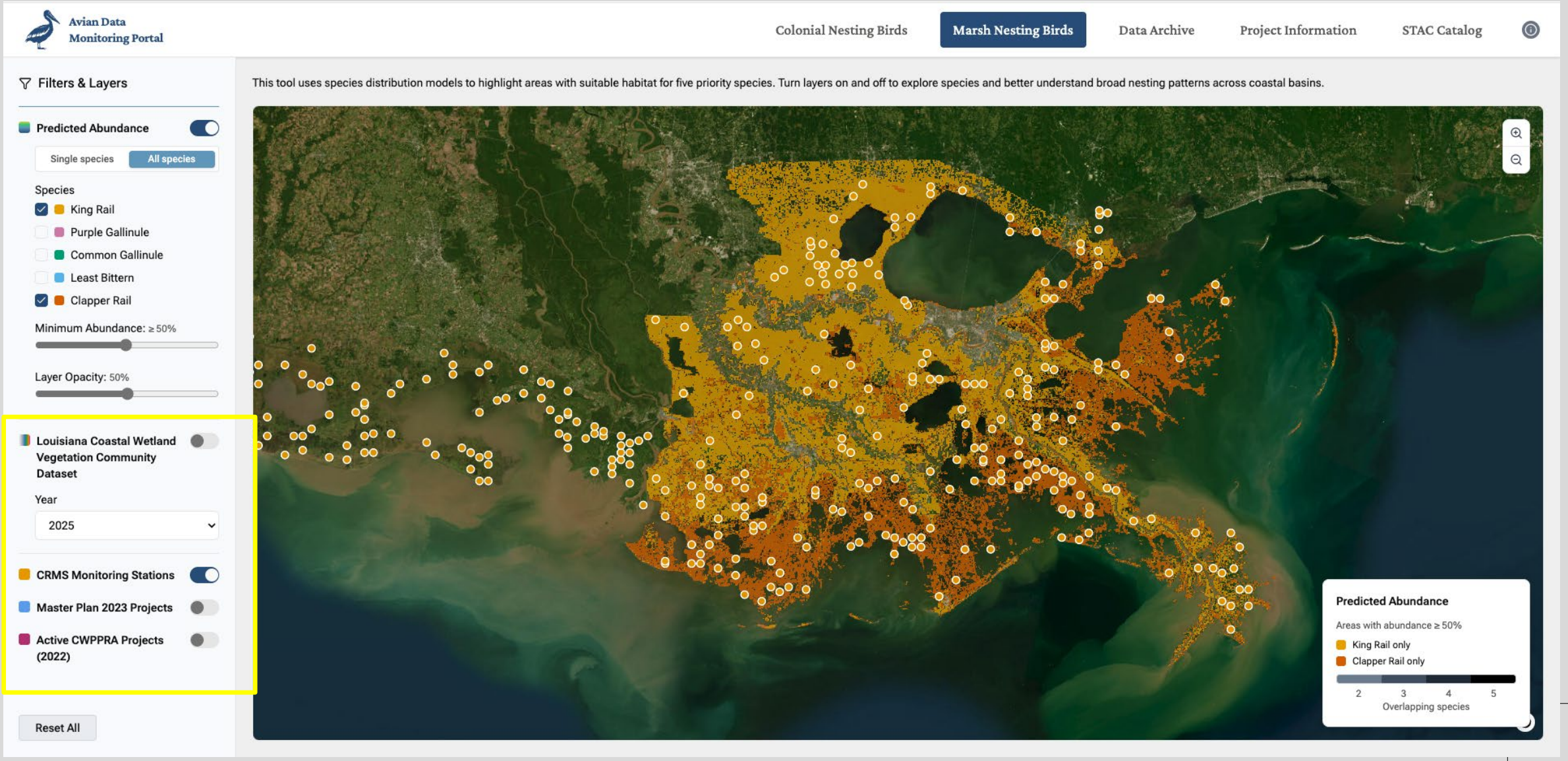
2.3 MARSH-NESTING BIRD TABLES

The information provided in the following tables relates to marsh-nesting birds (see the definition for this bird group in Section 2.1). Each table is based upon a ... also includes the reason each habitat characteristic is important for marsh-nesting birds and the specific species of birds where they apply). Table 7 provides desi... and information on whether those projects were targeted bird restoration projects. Table 8 provides *project-specific* lessons learned relating to each habitat characte... highlights current data gaps and information needs relating to *bird-specific* knowledge with regards to each habitat characteristic.

Table 6. Habitat characteristics for marsh-nesting birds. Additional information is provided in Section 3.2.2.

Preferential Avian Nesting Habitat Characteristic	Consideration	Reas
1. Proximity to Human Activity and Mammalian Predators	Not in close proximity (suggested >4 mi) to any human development or activity or mammalian predators.	Hum... to ne... racco...
2. Elevation/Topography	Elevation heterogeneity within the tidal range (see Section 3.2 for additional discussion) will support more marsh-nesting birds and wetland-reliant wildlife species across more water levels than uniform elevation design. Elevation variation outside of tidal range could all be too high or too low and not serve the intended purpose.	Eleva... of ve... (see ...
3. Land/Water Interspersion and Edge Features	All marsh types: Recommend approximately 30–60% open water to land cover ratio; including 10% deeper water (3–5 ft). For reference, this cover ratio generally corresponds to WVA interspersion classes 2 and 3, which are familiar to many marsh restoration practitioners. These habitats also include features such as shallow slopes adjacent to deep water edges and topographic heterogeneity.	The ... vege... varia... habit...
4. Hydrologic Connectivity	Incorporate temporary/seasonal shallow (<6–8 in) pools. Connectivity to deeper (3–5 ft) ponds and	Hydr...

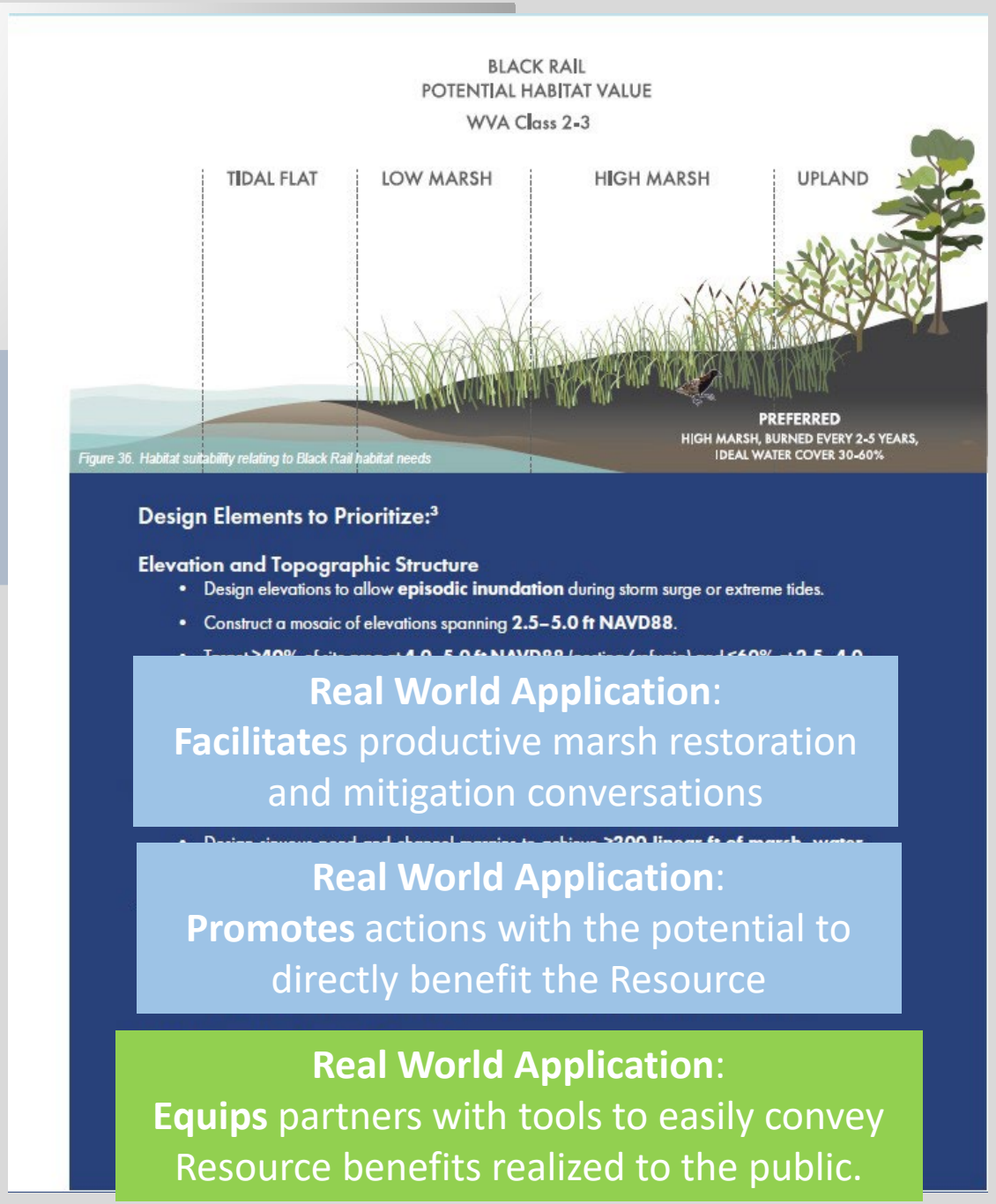
PORTAL UPDATES: MARSH-NESTING BIRDS



Emerging Opportunities
Black Rail

Design Roadmap, Habitat Management and Performance Monitoring Protocols



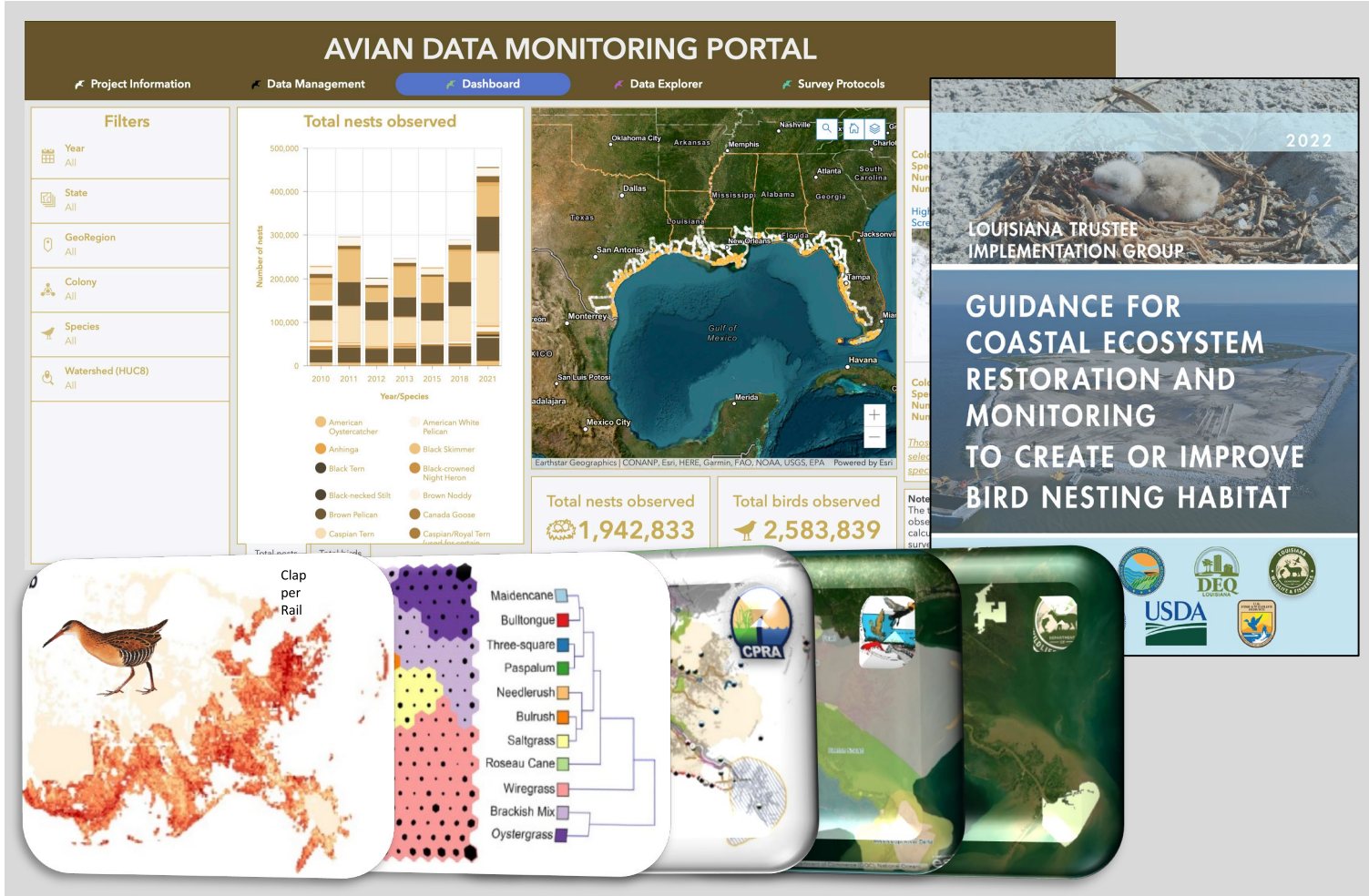


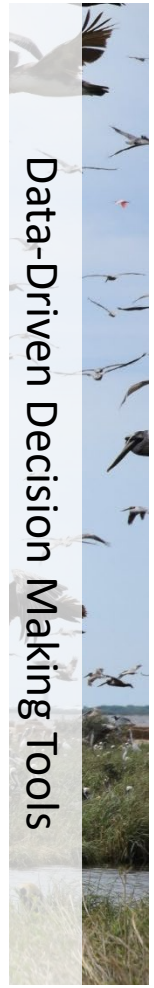
Real World Application:
Facilitates productive marsh restoration and mitigation conversations

Real World Application:
Promotes actions with the potential to directly benefit the Resource

Real World Application:
Equips partners with tools to easily convey Resource benefits realized to the public.

Celebrating Accomplishments





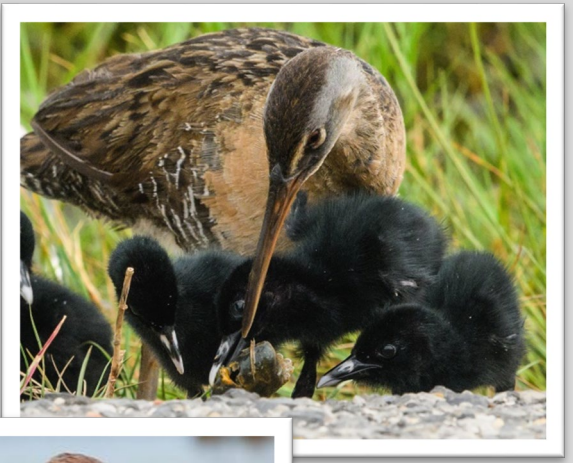
Data-Driven Decision Making Tools

Historic Brown Pelican Colony Restoration

… with More to Come



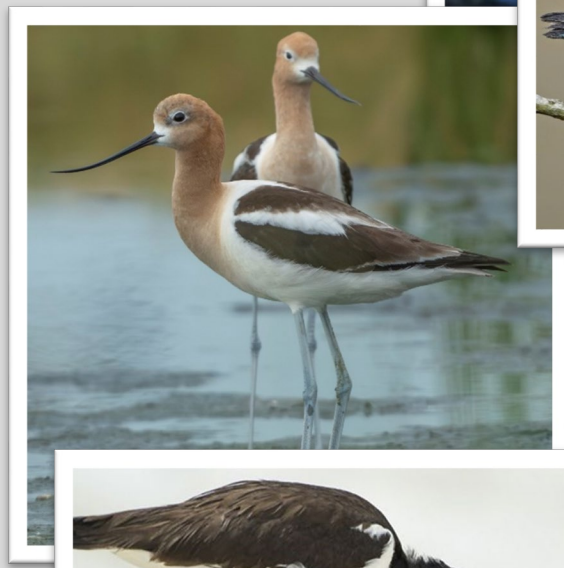




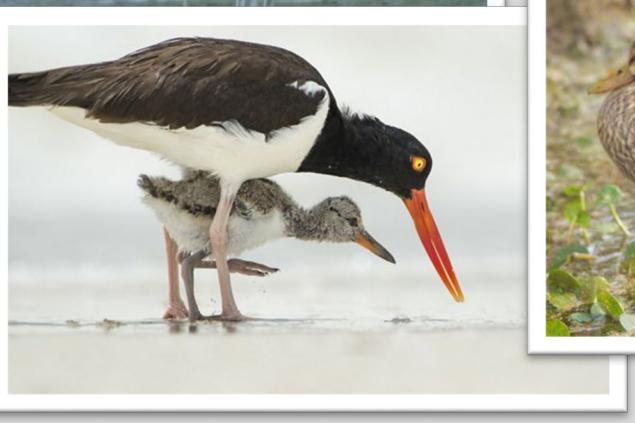


















Programmatic Bird Restoration (RP 9)

- **Target Bird Groups**: Northern Gulf Nesting Birds, including select Colonial Waterbirds, Solitary Beach Nesting Birds, Non-Breeding Shorebirds, and Marsh Birds.






- Prioritizes implementation of proven **Best Management Practices**
- Enhancing Trustees capacity (efficiency, cost effectiveness) to **generate real-world avian benefits** throughout the state's coastal zone.



SOUTHWEST LOUISIANA COASTAL SUMMIT

October 27, 2026
L'Auberge Casino
Lake Charles, LA

COALITION TO RESTORE COASTAL LOUISIANA

Applying Marsh-Nesting Bird Habitat Guidance to Coastal Restoration Design in Southwest Louisiana

October 27, 3:00 PM - 4:00 PM | Magnolia/Bluebonnet Room

Chenier Plain: Hydrology, Landscape and Marsh Management | Individual Presentation

Presenter

Jessica Henkel
Director of Coastal Ecology, The Water Institute

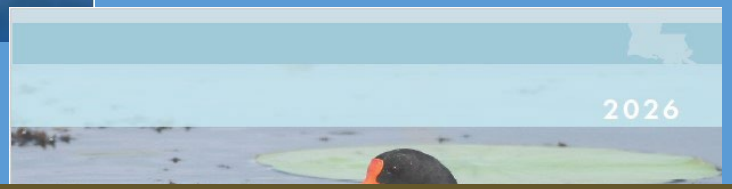
Avian Restoration, Monitoring and Adaptive Management in Southwest Louisiana

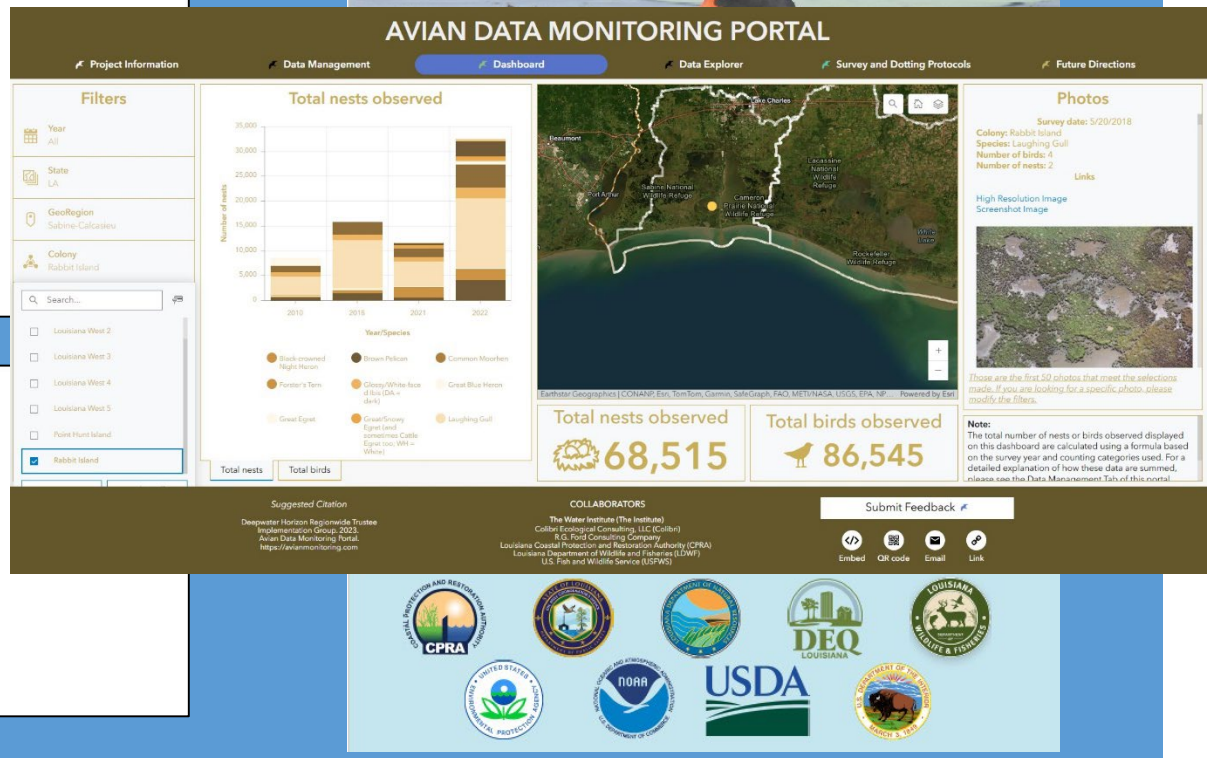
October 27, 3:00 PM - 4:00 PM | Magnolia/Bluebonnet Room

Data, Science and Innovation in Restoration | Individual Presentation

Presenter

Jon Wiebe
Program Manager, Louisiana Department of Wildlife and Fisheries





Louisiana Trustee Implementation Group

Regionwide Trustee Implementation Group

Collaborators

Questions

