



OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

MONTHLY REPORT

July 2023
(June 16th, 2023 – July 15th, 2023)

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ADMINISTRATION

- The Office of Fish and Wildlife Information Systems (OIS) has 38 projects in progress and two new projects requested through the GIS Project Request Form.
- OIS represented NJFW at, and participated in, the NJDEP GIS Program Representatives Meeting.
- OIS filled a GIS Specialist temp position and a seasonal GPS Field/GIS Technician position.
- Field GPS training was conducted for existing staff and new employees.
- OIS held a NJFW GIS Point of Contact (POC) meeting to get input from all Bureaus/Units in NJFW on GIS needs and upcoming projects.
- OIS staff submitted abstracts for talks and poster presentations at the Fall Northeast Arc Users Conference.

GIS DATA DEVELOPMENT

Shellfish Aquaculture Lease Lot Data

- OIS is working to set up a new versioning workflow for Bureau of Shellfisheries to handle edits and updates to this dataset.

Freshwater Fishing Opportunities and Access

- OIS presented a first pilot project mapping freshwater fishing regulations. After discussions with the Bureau of Freshwater Fisheries, revisions are being made and a second pilot project focused on two watersheds is in development.

New Jersey Statewide Trails Dataset

- No update

Diadromous Fish Habitat Mapping and Timing Restrictions

- OIS staff is continuing working on a pilot area in Great Egg Harbor River watershed to model the potential species presence by life history stage and associated timing restrictions.

Wildlife Management Area Boundary Alignment

- OIS staff mapped 10 parcels and scanned documents for 13 parcels:

Landscape Project

- OIS is met with ENSP regarding the next update to the Landscape Project mapping to determine a timeline for the new listing proposal and public release of version 3.4.
- ENSP will begin selecting habitat preference for each species to be newly listed.
- OIS will begin running draft models and producing outputs for review once habitat preference selections are completed for each species and completed species occurrence areas are provided by ENSP.

Hard Clam (Estuarine) Survey Mapping

- OIS will be meeting with Bureau of Shellfisheries to finalize the publication format of this dataset.

Wildlife Management Area System Inventory

- OIS completed a new schema and is working to transfer old data into a new service so data collection on WMA habitat patch management activities via ArcGIS Field Maps can continue.

Law Enforcement Southern Region Patrol Assignments

- OIS digitized the boundaries of the Southern Region Patrol assignments and created wall maps for BLE. This will be pursued statewide, so the patrol assignments can be loaded into EPCEMS and used in patrol vehicles.

GIS ANALYSIS

Ocean Trawl Survey Environmental/Biological Analysis

- No update.

Habitat Change Analysis Project (HCAP)

- OIS is working with Rowan University on planning the next round of GIS analysis.

Summer flounder distribution by size and sex

- No update.

CARTOGRAPHIC PRODUCTION

Bear Incident Mapping

- OIS staff met with members of I&E and Sustainable Waste Planning to discuss a map showing bear incidences that will help them plan different areas throughout the state. A statewide heat map was created first so they could choose the municipalities that they want to look at more closely. They've chosen the municipalities based on that and further work continues.

Comprehensive Black Bear Management Project (CBBMP) mapping

- OIS staff produced an updated map of bear incidents for use in the CBBMP report.

WEB MAP/APP PRODUCTION

Hunting & Trapping Explorer

- Several updates were made to the various web apps, regarding season dates, regulations, etc.

Wildlife Management Area Explorer

- The Upland Bird Stocking web app has been updated with the stocking schedule and number of birds per area and is ready for publication

Saltwater Fishing Explorer

- No updates.

Freshwater Fishing Explorer

- A change in the way updates are made to external data addressed a bug that caused updates to revert to previous versions.

Conservation Focal Area Application

- No updates

Marine Resources GeoHub

- OIS staff has received new layers to be added to the Marine Resources GeoHub.

Shared Wildlife Health Information System (SWHIS)

- OIS met with the Wildlife Futures Program (WFP) at UPenn and the Timmons Group to collaborate regarding a bulk upload of NJFW Health and Forensic's animal morbidity and mortality information.

Wild Turkey Brood Sighting Survey

- No updates.

Turkey Permit Sales and Harvests Dashboard

- OIS met with Internet License System (ILS) staff to.

Northeast Regional Conservation Priorities web application

- In development

Fishing and Hunting License Agent Locator web application

- Edits were made to add, remove and update existing agents.

Lenape Farms Story Map

- OIS is working with BLM and Stockton University to finalize a Story Map highlighting land management projects and activities.

Deer Disease Sighting Survey

- OIS is creating a Deer Disease (EHD/CWD) Reporting Tool for the public to submit information on sick and dead deer observed.

GIS TECHNICAL GUIDANCE

- OIS met with NJDEP law enforcement units and Motorola regarding GIS data for a new computer-aided dispatch (CAD) system. OIS will work on compilation of data relevant to NJFW's Bureau of Law Enforcement.
- OIS staff responded to a survey request about the state website that was updated last year.
- OIS staff responded to internal and external inquiries regarding various datasets and applications, including Landscape Project and the Hunting & Trapping Explorer.
- OIS staff continues to work with Bureau of Shellfisheries regarding their collaboration with Rutgers in a project developing a GIS-based tool for spatial planning and management of shellfish aquaculture in New Jersey.

- OIS began a second summer of fieldwork with BGIS and Science and Research on the saltwater marsh project at Great Bay Boulevard WMA and Forsythe Wildlife Refuge. OIS flew over two sites at Forsythe NWR near Manahawkin to collect imagery including closeup imagery of 36 plots of *Spartina patens*, a species that is sensitive to inundation. One site is ditched while the other is not. Ditched marshes have been shown to be less stable and more subject to pond expansion and inundation. We are looking for differences in *S. patens* health between the two sites.