

Wildlife Retrieval Efforts During the Cooper River Incident

5th Biennial Freshwater Spills

Symposium

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Location of Spill



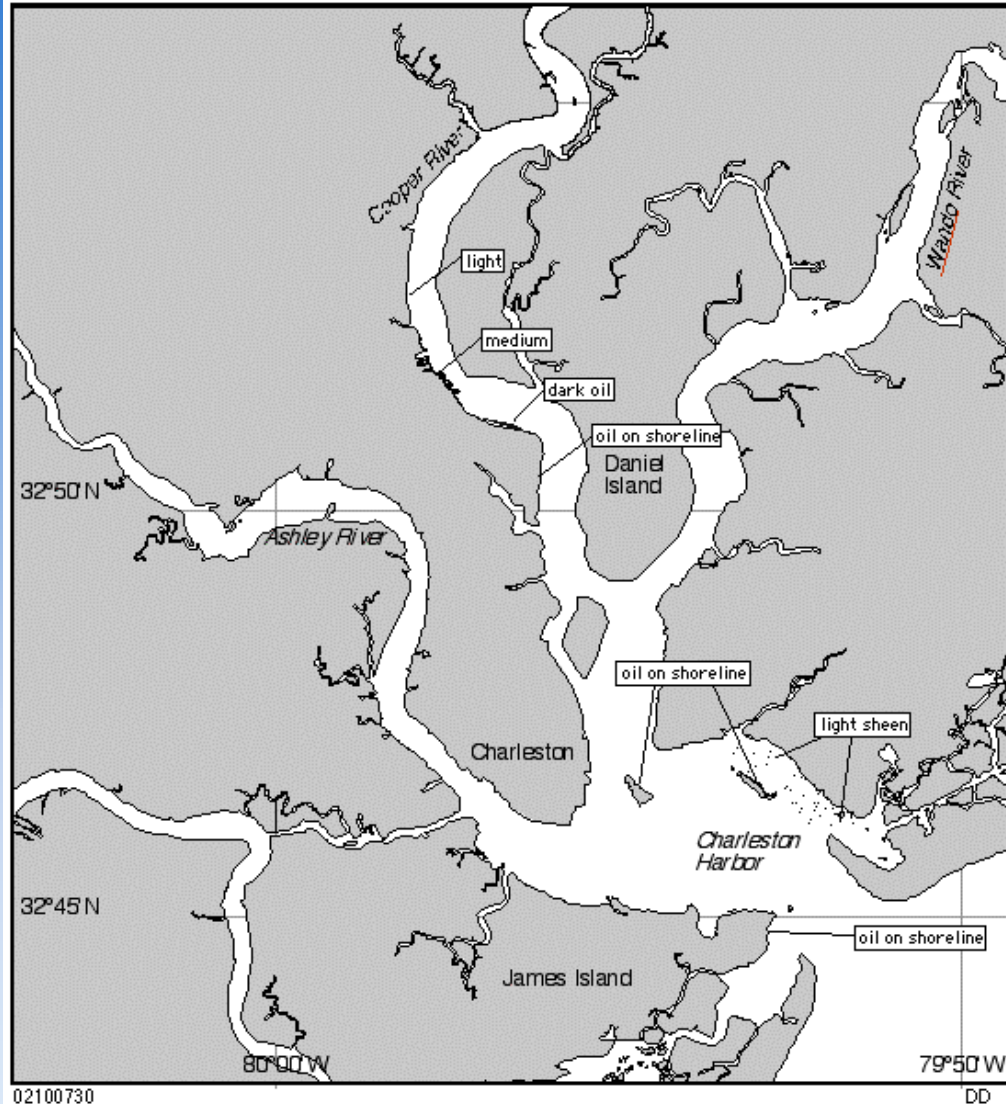
- Charleston Harbor
- South Carolina riverine environment
- Cooper River system
 - Wando River
 - Cooper River
 - Ashley River

Charleston, SC

Overflight Map
prepared by NOAA

Date/Time: 02 Oct 02 0730-0900
Platform: H65 Dauphine
Observers: Wilke(State), Neives(CG)

USE ONLY AS A GENERAL REFERENCE Graphic does not represent precise locations or amounts of oil

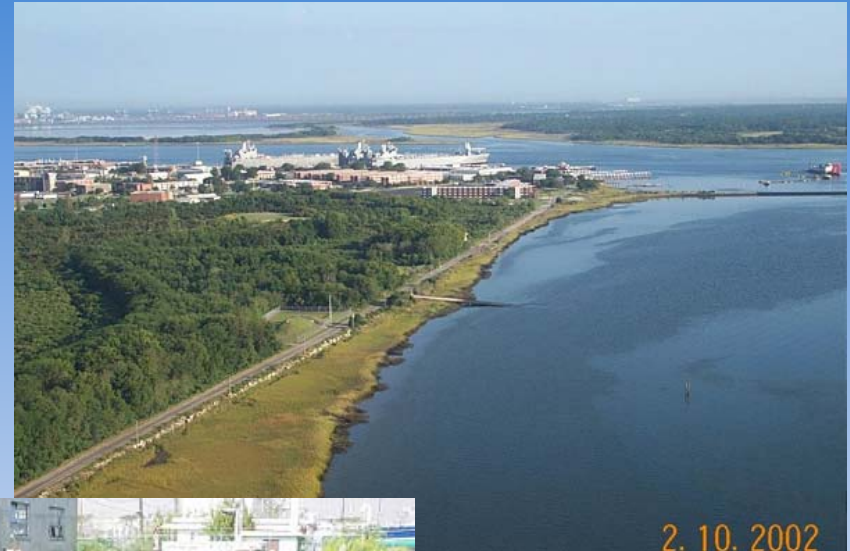


History of the Spill

- Tri-State was notified on 1 Oct 2002 by USFWS
- Approximately 1,000 gallons of #6 fuel oil (amount reported initially)
- Approximately 10 miles of shoreline affected

Shoreline Types

- Industrial piers
 - Riprap
- Marsh
- Sandy beach



Resources at Risk

- Commercial
 - port operations
 - fishing areas
 - shellfish beds
- Recreational areas
- Historic sites
- Wildlife including birds, marine mammals and reptiles

Field Concerns

- Weather conditions
 - Fog
 - Temperature
 - Daylight
 - Tides
- Water safety
- Buddy system
- Communications (radios, cell phones)

Safety in the Field

- PPE
 - Sunscreen, sunglasses, insect repellent
- PFDs (on-water and near water ops)
- Binoculars
- Drinking water
- Communication

Wildlife Surveys

- “Calibrated” eyes
- Knowledge of species & natural history
- Documentation
 - Field notes, tally sheets, GPS
- Species, #s, % of total oiled, est. degree oiling, flight capabilities
- Consider loafing, roosting, feeding, nesting areas (may be outside area of direct impact)

Shorebirds

- Small to medium sized birds with thin bills, long legs
- Often found in open shoreline habitats, mudflats
- Forage on small aquatic insects, worms, crustaceans



Great egret

- Entirely white plumage
- Long, thick yellow bill
- Black legs and feet
- Breeds in low trees in small colonies
- Common in marshes, mudflats
- Eats fish, aquatic insects, frogs, crabs



Photo by George Jameson

Crab Bank

- South of Shem Creek
- Small, vegetated sandbar
- Nesting habitat for many species



Brown pelican

(*pelicanus occidentalis*)

- Highly social
- Colonial nesters
- Long bill with pouch
- Eats exclusively fish
 - plunge-divers



Retrieval Plan

- Trustee approval
- Incident command approval
- Capture immediately debilitated animals
- ID required resources
- Initiate baiting and capture

Resources

- People
 - Tri-State
 - SCDNR
 - USFWS
- Boats with skilled operators
- Nets
- Bait

Basic Capture Principle

- Aquatic species will escape to the water
 - Approaching from the water is often best
 - Herd animals to shore
 - Easier to catch on land
 - Be safety conscious
 - If on land, get between the bird and the water
 - Work in teams, good comms needed

Retrieval Strategies

- Tidal influences
- Multiple boats
- Good teamwork
- Special considerations

Capture Myopathy

- Most frequent in heavy bodied birds (eg waterfowl)
- Influenced by ambient temperature
- Direct result of over pursuit and stress
- Physiologic and metabolic changes resulting in muscle damage that may lead to renal failure and death

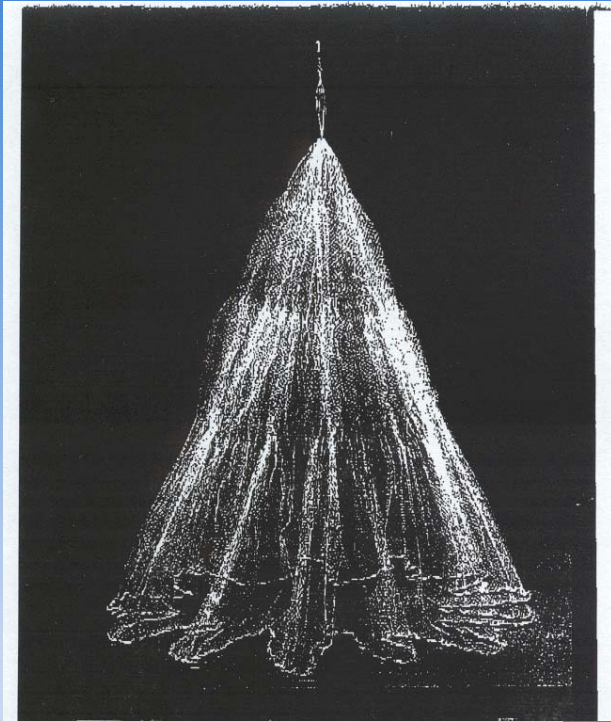


Retrieval Techniques

- Baiting
- Manual grabbing
- Netting



Nets



- Bow net
- Cast net



Handler Safety

- Buddy system
- Away from your face; waist level
- Aware of others around you
- Firm but sensitive hold
- CALMLY alert buddy if restraint of animal fails



Animal Safety



- Minimize stress
- Control head, loosely cover head
- Support or restrain feet
- Keep wings folded in natural position
- Firm but sensitive hold

Container Requirements

- Appropriate size
 - approx. 1.5X the size of the bird
- Solid walls with ventilation holes on all sides
 - multiple holes, usually top 1/3 of box
 - holes sized so that bird's head doesn't fit through
- Lined with a towel or sorbent material
- Secure closure or lid
- Durability

Types of Containers

- Boxes (don't forget the tape!)
- Pet Carriers
 - cardboard
 - plastic
 - collapsible
 - sky kennels



Retrieval Information

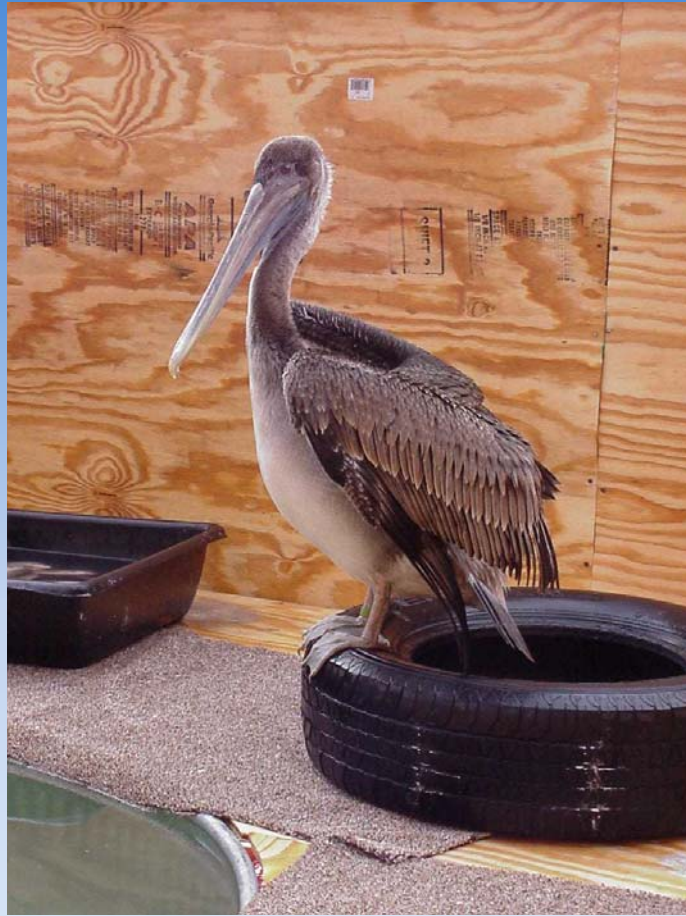
- Location (zone)
- Date and time
- Names and team ID
- Team field contact number
- Species and animal field ID number
- Notes
 - Field treatments, observations, family unit

Wildlife Captured



- 21 Brown pelicans
- 1 Double-crested cormorant
- 1 Boat-tailed grackle
- NPS Maintenance Facility at Sullivan's Island Lifesaving Station

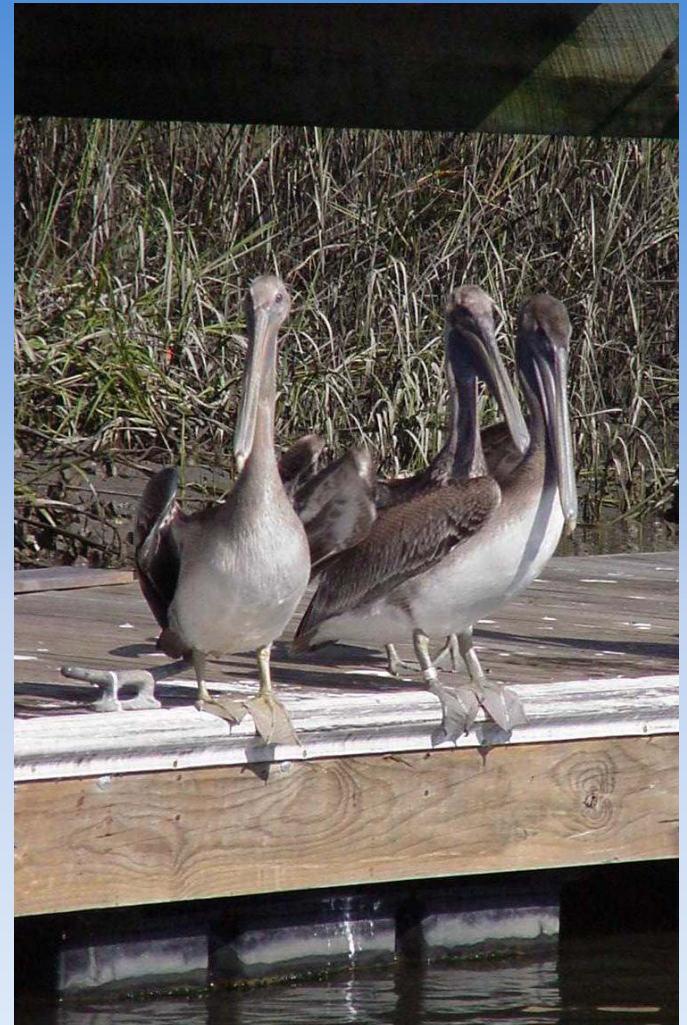
The Rehab process



Release



Post-release monitoring



In Conclusion...

- Cooperative effort
- Multiple resources
- Public was well informed
- Pro-active retrieval efforts supported high release rate