INLAND STRANDED OIL SPECIES FACT SHEET FOR RESPONSE:

Herons and Egrets

Key Species

Great Blue Heron

Great Egret

Cattle Egret

Grey Heron

Herons and Egrets are birds that belong to the family Ardeidae which contains around 60 species of birds. Herons range from 3-6 lbs and a height of 3-6 feet with a wingspan of up to 91 inches. Egrets are smaller and range from 2-2.5 lbs. and a height of around 3.25 feet and a wingspan of 59 inches. Herons and egrets are distinguished by their long thin legs," S" shaped necks and long beaks. Their feathers range from blue to white and grey depending on the species.

Herons and Egrets can be found all over the world. In the Americas, they can be found anywhere in the continental US. They can be found as high as Southern Canada and as low as South America. Herons and egrets that live in the northern US and Southern Canada migrate to southern states or even as far as South America in the winter to avoid freezing waters and to find ample food. Their habitats are always around water, but most species prefer swampy areas. They tend to live by shallow water such as lakes, ponds, and marshes.

These birds have a carnivorous diet. Their main sources of food come from smaller animals in the water such as fish, mollusk, crayfish, and insect. They have even been known to eat larger animals like mice, frogs, and snakes. These birds are solitary hunters and only eat live prey.

Herons and egrets are very common and are listed as species of least concern. Egrets have an average life span of around 15 years while herons can live anywhere form 15-20 years. Their mating season last between April to May. Although these birds are mostly solitary, they come together during this time and live together. The communities these birds live in are referred to as either heronries or rookeries. Their nests are built high above the ground in either trees, cliffs, or bushes. The eggs take several weeks to hatch, then by midsummer the parents and chicks separate.

Leghold are the most effective capture method for herons/egrets. However, if the trap is not set properly or a bird is caught in a trap designed for another animal it could lead to injury or death. Softer padding and lowered pressure are required for optimal safety.

II. Sensitivity to Oil

Herons and Egrets, like most birds, are most affected by oil when it contaminates their feathers. Oil will make their feathers no longer waterproof and will cause them to sink. They will also be too heavy to fly. In addition, they will not be able to control their body temperature.

Preening of the feathers will result in the ingestion of oil. In addition, these birds can ingest oil when eating prey that has been contaminated with it. This can result in such health problems as amenia, dehydration, lung, liver and kidney damage, ulceration, diarrhea, and damage to their immune system. Oil ingesting can also lead to neurological failure and chemicals in the oil could result in cancer throughout the body.

When covered in oil, these birds will hyper fixate on preening causing them to forego necessary tasks resulting in starvation drowning ar[illegible] make them more susceptible to predators. The birds will have an increase metabolic rate to combat hypothermia which results in the need for more food. When a bird covered in oil sits on their eggs, this can result in damage to the eggs. Even a single drop of oil on these eggs will result in birth defects.

A heron covered in oil.

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III. Sensitivity to Response Methods

The following text describes potential adverse impacts to this species and its habitat resulting from various oil spill response methods and provides recommendations to reduce impact when these methods are implemented. This is not intended to preclude the use of any particular methods, but rather to aid responders in balancing the need to remove oil with the possible adverse effects of removal with respect to bald eagles. More detail about the response methods themselves can be found in the Inland Response Tactics Manual.

Least Adverse Impacts

Boom Deployment

- Control the movement of floating oil to prevent or reduce contamination of species.

Skimming

- Recover floating oil from water surface to prevent or reduce contamination of species.

Physical Herding

- Free oil trapped in vegetation or debris and away from sensitive species habitat like feeding, nesting, and staging sites.

Vacuum

- Minimal effects to species if foot and vehicular traffic is controlled and minimal substrate is removed.

Manual Cleaning/Removal

- Oiled debris should be removed to prevent ingestion of oil.

Some Adverse Impact

Dispersants

- Dispersants/detergent contact with species can reduce insulating value of plumage.

Scare Tactics/Hazing

- Increase stressing of species may lead to shock and fatalities.

Most Adverse Impact

In-Situ Burning

- Haze species away from burn areas and or the capture of oiled birds
- Will destroy species habitat.

Natural Attenuation

- This method may not be suitable for species nesting, foraging, and staging areas.

Vegetation Removal

- Will destroy species habitat. Trampled vegetation will recover slowly.

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IV. Sensitivity to Hazing and Capture Methods

The following text describes potential adverse impacts resulting from wildlife hazing and capture methods and provides recommendations to reduce impact when these methods are implemented. Wildlife hazing and capture must be done under the direction of the wildlife branch director and a hazing plan that includes safety considerations must be in place. This is not intended to preclude the use of any particular methods, but rather to aid responders with determining suitable techniques.

Least Adverse Capture/Hazing Impacts

Capture-Modified Leghold Traps

- Traps can be modified with shock absorbers and lower tension for best and safest results.
- Traps must be secured to prevent birds from flying away.

Visual Deterrent(s)- reflective materials, lights/lasers, kites/balloons, scarecrows/effigies

- Mylar tape can be used to startle birds, but species will habituate quickly to reflective hazing techniques.
- Brightly colored balloons, kites and effigies designed to imitate predators may startle birds. Need to regularly monitor and maintain to ensure effectiveness.
- Lasers/lights most effective in dim light and areas where pyrotechnics cannot be used.
- Need to ensure effigies/scarecrows do not offend public.

Acoustic Deterrent(s)- natural calls, artificial sounds

- Artificial sounds like air horns, whistles, bells are a short-term hazing technique.

Some Adverse Capture/Hazing Impacts

Capture-Modified Leghold Traps

- Most effective trap but can result in injury if not set properly or bird falls in trap designated for other animal.
- Traps can be modified with shock absorbers and lower tension for best and safest results.
- Traps must be secured to prevent birds from flying away.

Capture- Other traps/cages

- Herons/Egrets have very fragile legs and necks that can be damaged easily from some traps.
- Should be placed in areas not susceptible to further oiling and away from spill cleanup zones.
- Stronger traps for other animals should be put out of range for safety.

Capture- manual capture/nets

- Trained wildlife handler with proper PPE should capture most heavily oiled individual birds.

Most Adverse Capture/Hazing Impacts

Acoustic Deterrent(s)- propane cannon

- Upon Incident Command approval, can be set up to fire automatically in areas not susceptible to fire.
- Locations should be mapped and made known to all responders.
- May be vulnerable to sabotage by locals/public.

Capture- cannon nets

- Technique should only be implemented by a trained wildlife professional.
- Responsible party is not liable for injured/killed wildlife resulting from poorly chosen/implemented capture techniques.
- Technique is not reliable because bait can attract unwanted species.

Acoustic/Visual Deterrent(s)- pyrotechnics

- Users must be trained to use pyrotechnics, wear proper protective equipment, follow Class C explosive guidelines, and notify responders in vicinity of use.
- Heron/egret habitats are around grassy areas that are easily susceptible to wildfire.

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