INLAND STRANDED OIL SPECIES FACT SHEET FOR RESPONSE:

Bald Eagle (Haliaeetus leucocephalus)

Bald Eagle- Plumage Development

Juvenile

Second-Third year

Fourth year

Adult

Golden Eagle

I. Species Description

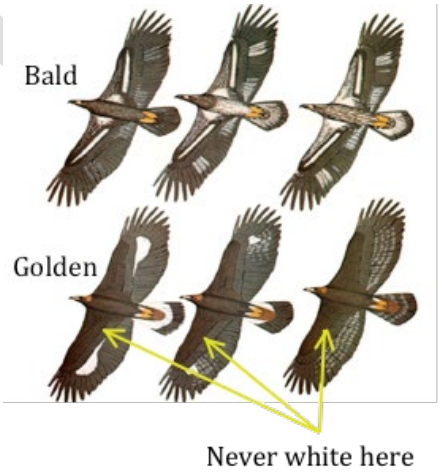
Bald Eagles are hawk-like birds that dwarf other raptors. With an average length of 3 feet and average weight of 9.47lbs. Its large size appears even larger because of its wingspan which can range from 70 to 90 inches (5.83-7.5 ft). There is little difference between male and female except that the females are slightly bigger. The Bald Eagle uses its large beak sharp talons and keen eyesight to become apex predators.

Native only to North America, their range encompasses most of Canada and Alaska, all the contiguous United States, and northern Mexico. Bald eagles exhibit complex migration patterns depending on age and location. Many bald eagles are non-migratory. They are often found in habitats that contain open water, an abundant food supply, and old-growth trees for nesting. Typically built below the crowns of mature cottonwoods and conifers, bald eagle nests can reach 10 ft. in diameter and weigh up to a half ton.

Their diet consists of fish, small mammals, invertebrates, reptiles, amphibians. When hunting fish, eagles will plunge themselves into the water to catch their prey. An opportunistic species, bald eagles are known to eat carrion, including roadkill. The average lifespan of a bald eagle is 15-20 years.

The bald eagle is considered an American conservation success story. Habitat loss, declining prey populations, hunting, and pesticide use almost drove the species to extinction. Significant conservation efforts have restored the species, with an estimated global population greater than 316,000 individuals.

Bald eagle casualty from Exxon Valdez Spill



Immature bald eagles are often mistaken for golden eagles, *Aquila chrysaetos*, due to their brown and mottled appearance. Though golden eagles are more common in the American West, a population does winter in the blufflands of the Upper Mississippi River Valley. Unlike bald eagles, golden eagles are terrestrial hunters and are not often seen near water. Immature bald eagles exhibit morphological differences, including slightly larger beaks and feathers that stop above the ankles.

II. Sensitivity to Oil

Bald Eagles are some of the most sensitive and vulnerable species to oil spills. Direct exposure to oil causes feathers to separate, impairs waterproofing, buoyancy, and exposes skin to hyper or hypothermia and lesions. Oil can be ingested while preening or absorbed through the skin. When plunging for fish, eagles may cover themselves in oil left on the water's surface. Eagles may also ingest oil if they eat from prey or carcasses that has been covered in oil. This may result in inflammation, intestinal hemorrhaging, and liver damage, among other life-threatening conditions. Oiled eagles will focus all attention on preening and will forgo hunting. This can lead to other severe conditions such as dehydration, anemia, and extreme weight-loss. **State and Federal wildlife officials must be notified for response to oiled birds. Oiled eagles require proper collection, cleaning, and treatment by certified, state-licensed wildlife rehabilitator at an off-site facility, though temporary processing centers may be necessary.**

Information compiled by UMRBA staff from EPA, USFWS, and USDA sources, July 2021.

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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 the contamination of species.

Physical Herding

- Free oil trapped in vegetation or debris and away from sensitive eagle feeding areas.

Vacuum

- Minimal effects to eagles if foot and vehicular traffic and other disturbances are avoided/minimized around trees containing nests.

Manual Cleaning/Removal

- Oiled debris and especially oiled carcasses should be removed to prevent scavenging and the ingestion of oil.

Scare Tactics/Hazing

- Increased stressing of eagles may lead to shock and fatalities

Some Adverse Impact

In-Situ Burning

- May need to haze eagles from burn areas: need to avoid areas around nests during breeding season

Dispersants

- Dispersant/detergent contact with eagles can reduce insulating value of plumage.

Most Adverse Impact

Natural Attenuation

- This method may not be suitable for nesting eagles are in areas where eagles are known to feed.

Disturbance of or Tampering with Nesting Sites

- Disturbance during breeding season can result in adults abandoning nest and thus the death of embryos and chicks.

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

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

- Mylar tape can be used to startle birds, but eagles 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

Capture- traps/cages

- Should be placed in areas not susceptible to further oiling and away from spill cleanup zones

Some Adverse Capture/Hazing Impacts

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
- Do not use when there is a risk of fire

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

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