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# Sea Ducks: 15 Species in North America



International partnership under the North American Waterfowl Management Plan:

- USFWS
- Canadian Wildlife Service
- USGS
- Flyway Councils

- States
- Provinces
- BOEM
- Ducks Unlimited



Promotes conservation of sea ducks through partnerships that:

(1) Generate and disseminate knowledge that will inform management decisions, habitat protection initiatives, and conservation; and,

(2) Increase awareness of sea ducks and encourage engagement within conservation, industrial, and scientific communities, and the public, through effective communications and outreach.

# Sea Duck Key Habitat Sites Atlas



- Identifies 85 sites in North America that are most critical to sea ducks during at least one season
  - Used strict abundance and density criteria
  - Consolidated information from numerous monitoring and telemetry studies
- Intent: Aid in prioritization of habitats for conservation, environmental assessments, oil spill preparedness & response

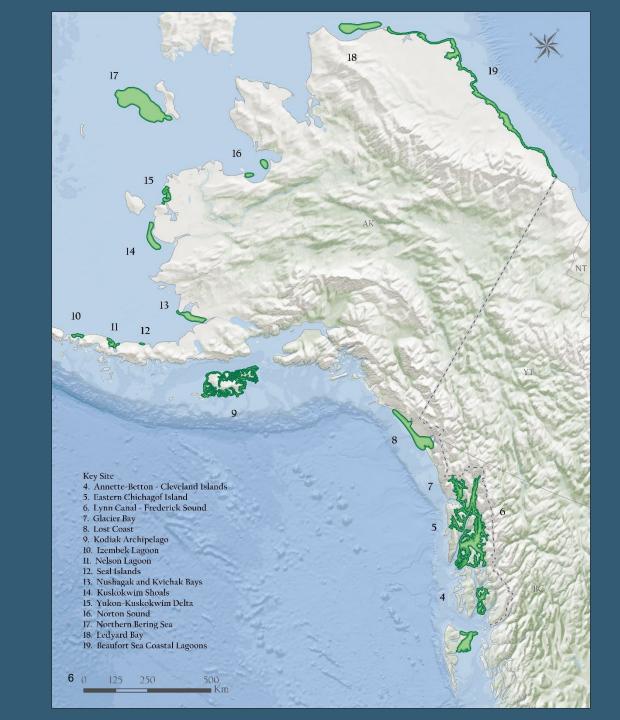
## Sea Duck Key Sites in Alaska

Southeast:

Annette-Betton-Cleveland Islands Eastern Chichagof Island Lynn Canal-Frederick Sound Glacier Bay Lost Coast

Southwest:

Izembek Lagoon Nelson Lagoon Seal Islands Nushagak and Kvichak Bays Kuskokwim Shoals Yukon-Kuskokwim Delta Northwest/Arctic: Norton Sound Northern Bering Sea Ledyard Bay Beaufort Sea Coastal Lagoons Kodiak Archipelago



#### Eastern Chichagof Island, Alaska

#### Location: 57.7695, -135.2534; 57°46'N, 135°15'W

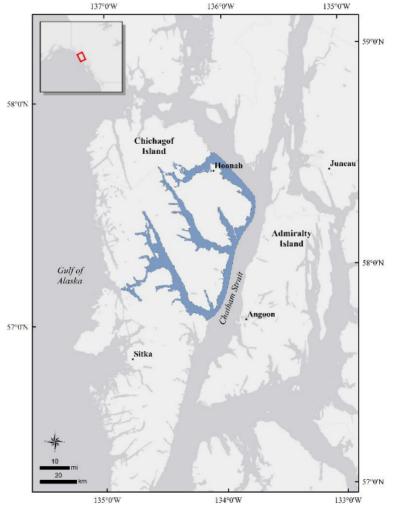
#### Size: 1,247 km<sup>2</sup>

**Description:** Chichagof Island is one of the largest islands of the Alexander Archipelago in Southeast Alaska. This archipelago is comprised of more than 1,000 islands and is characterized by deep channels and fjords. Surrounding terrestrial areas are mostly mountainous, reaching elevations of almost 1,200 m on Chichagof Island (Carstensen et al. 2007). Steep-sided valleys and extensive estuaries punctuate the landscape and temperate rainforests are the dominant vegetation type. Temperatures are moderated by the Pacific Ocean, producing cool summers, mild winters and high levels of precipitation. Coastal waters are generally ice-free but areas with significant freshwater input (e.g., heads of bays and inlets) occasionally freeze.

This Key Habitat site is bounded on the north by southeastern Icy Strait, on the east by northwestern Chatham Strait (separating Chichagof and Admiralty islands), and on the south by Peril Strait, separating Chichagof and Baranof islands. The convoluted coastline includes Port Frederick, Freshwater Bay, Tenakee Inlet, Sitkoh Bay, and Hoonah Sound, as well as numerous smaller bays, channels, inlets, islands and reefs.

#### Precision and correction of estimates presented: Bird

abundance numbers presented for this key habitat site have been adjusted to account for incomplete detection, either by applying species-specific visibility correction factors (VCF) estimated for surveys specific to this area, or from VCFs estimated from other similar areas and surveys.



Sensitivities: Sea ducks wintering at the northern periphery of their range may experience lower over-winter survival; Uher-Koch et al. (2016) found that female and immature Surf Scoters had lower survival rates in Southeast Alaska than in the southern part of their range and suggested poor body condition and/or

# Sea Duck

# Sea Duck Key Habitat Sites Atlas

Potential uses for NPFMC and partners:

Help identify areas where/when sea duck distribution and fishing activities intersect to inform ecosystem-based approaches to conservation and research

## Threats to sea ducks in marine areas include:

- Climate change and ecosystem shifts
- Contaminants (e.g., oil spills)
- Collisions with vessels
- Disturbance during critical life stages (e.g., molting)



# Sea Duck Key Habitat Sites Atlas

# Complete Atlas available: seaduckjv.org (printed copies upon request)

## Next steps:

- Share with potential users
- Identify ways to conserve and protect key sites, reduce threats
- Revise/update at regular intervals



For more information, contact Kate Martin, USFWS, Kate\_Martin@fws.gov, 907-888-2243