

**TABLE 8-1
PREVALENCE OF BIOLOGICAL RESOURCES IN THE FOUR ENVIRONMENTAL SETTINGS**

Category	Species	April	May	June	July	August	September	October	November through March	
Onshore Land										
Fish	Arctic Grayling and other Freshwater Species	Present year-round in streams. Spawning occurs in shallow streams.						Overwintering occurs in deep holes of the Sagavanirktok and Kuparuk Rivers.		
	Arctic Cisco	--	--	--	--	--	--	Overwintering occurs in deep holes of the Colville and Sagavanirktok River Deltas.		
	Least Cisco	--	--	--	--	--	--	Overwintering occurs in the Colville River.		
	Broad Whitefish	--	Present in the Sagavanirktok and Colville Rivers and deltas throughout summer.						Overwintering occurs in the Colville River.	
			--	--	Spawning in tributaries	--	--			
	Char, Young	First two years of life cycle spent in freshwater.								
Char, Adult	--	--	--	Sagavanirktok, Canning, and Colville Rivers, and tributaries are spawning and overwintering grounds.						
Mammals	Caribou	Calving occurs on the open tundra.			Caribou remain on Arctic Coastal Plain before most return to the Brooks Range in late fall.			--	--	
	Arctic Fox	Year-round resident of Arctic Coastal Plain.								
	Grizzly Bears	Year-round resident of Arctic Coastal Plain; relatively inactive during winter hibernation.								
	Polar Bears	Population concentrated near the shorefast ice zone in winter. Individuals may den up to 25 miles (40 km) inland.		Some individuals may remain onshore and in lagoon areas during the summer.				Population concentrated near the shorefast ice zone in winter. Individuals may den up to 25 miles (40 km) inland.		
Migratory Birds		--	Early spring arrival of many migratory birds, after the snow melts they are present on tundra or near lakes and ponds.						--	
	Loons	--	Arrive late in the spring and remain until freezing weather; nest on large ponds.						--	
	Tundra Swan	--	Arrive early in the spring and remain until late September or October; nest on large ponds or lakes.						--	
	White-fronted Goose	--	Nest on tundra; molt near interior lakes. Migration occurs in late August				--	--	--	

**TABLE 8-1 (Cont.)
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Category	Species	April	May	June	July	August	September	October	November through March	
Onshore Land (Cont.)										
Migratory Birds (Cont.)	Brant	--	Main nesting areas are located in the vicinity of the Sagavanirktok River. Rearing/molting areas located in coastal salt marshes and large Arctic Coastal Plain lakes.					--		
	Oldsquaw and King Eider	--	Common nester throughout the project area.			Molt on Arctic Coastal Plain lakes.		--	--	
	Raptors: Snowy and Short-Eared Owl, Golden Eagle, and Gyrfalcons	--	Individuals occasionally observed passing through the area						--	
	Lapland Longspur and Shorebirds	--	Abundant tundra-nesters throughout project area.						--	--
	Snow Bunting	--	Nest in cavities often raised off the tundra (pipeline supports, debris, buildings, stored materials).						--	
Non-Migratory Birds	Common Raven, Snowy Owl, Willow and Rock Ptarmigan	Present year-round.								
Threatened or Endangered Species	Spectacled Eider	--	Nest throughout oil fields, primarily in wetter and ponded areas; females and young reside in marshy areas before migration.						--	
	Steller's Eider	--	--	Uncommon nesting species in the project area.				--	--	
Lagoons and Shorelines Inside the Barrier Islands										
Marine Invertebrates	Epifauna and Infauna	--	Populations must recolonize yearly after ice breakup due to bottomfast ice in shallow waters; brought in by water currents as ice moves out.						--	
	Phytoplankton	--	Brought in by water currents as ice moves out. Population bloom in late July to early August.							
	Zooplankton and Nekton	--	Brought in by water currents as ice moves out. Population bloom in August.						--	
Fish	Arctic Cisco	--	--	Young-of-the-year depart Mackenzie River and travel as far west as the Sagavanirktok and Colville Rivers.				--	--	
		--	Juveniles spend summers in lagoons and river deltas.						--	--

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Category	Species	April	May	June	July	August	September	October	November through March	
Lagoons and Shoreline Inside the Barrier Islands (Cont.)										
Fish (Cont.)	Arctic Cisco (Cont.)	--	Spawning adults migrate to MacKenzie River.		Pre-spawning fish use lagoons and river deltas.			--	--	
	Least Cisco	--	Least cisco migrate both east and west from the Colville River following breakup; some pass through Simpson Lagoon and Gwydyr Bay.			Least cisco pass through Simpson Lagoon and Gwydyr Bay again in the fall, returning to overwintering areas in the Colville River.		--	--	
	Broad Whitefish	--	Lagoons, Kuparuk River Delta, and Gwydyr Bay are used as feeding grounds during the open water season.					--	--	
	Char	--	Feeding grounds during open water season.						--	--
	Arctic Cod	--	Feeding grounds during open water season; spawning occurs in nearshore environments.						--	--
Marine Mammals	Ringed Seals	Ringed seals establish birthing dens in the shorefast ice in the spring.		Individuals may occasionally be observed in lagoon areas during open water.				Ringed seals maintain breathing holes and haul out dens in drifts in shorefast ice.		
Mammals	Caribou	--	--	Caribou may stand in coastal waters for insect relief.			--			
	Arctic Fox	--							May be observed on sea ice in lagoons during winter	
	Grizzly Bears	--	May be observed in shallow lagoon areas in summer.					--		
	Polar Bears	Population concentrated near the shorefast ice zone in winter.		Individuals occasionally remain onshore and in lagoon areas during the summer.					Population concentrated near the shorefast ice zone in winter.	
Migratory Birds		--	Spring and fall: migrating birds use leads and open water areas to stage and feed.					--	--	
		--	--	--	Critical sea duck molting area.			--	--	
	Loons	--	Arrive late in spring and remain until freezing weather; nest inland but forage in coastal waters.					--	--	
	White-fronted Goose	--	Non-breeders and juveniles may be in coastal areas; migrate late August.			--	--	--		

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Category	Species	April	May	June	July	August	September	October	November through March
Lagoons and Shoreline Inside the Barrier Islands (Cont.)									
Migratory Birds (Cont.)	Common Eider	--	Nest on barrier islands.					--	--
	Oldsquaw	--	--	--	Molt for several weeks in lagoons.		--	--	--
	Surf Scoter	--	--	--	Males molt in lagoon habitats.		--	--	--
	Pomarine and Parasitic Jaegers	--	Found during open water season in offshore waters and adjacent inland areas.					--	--
	Glaucous Gulls	--	Nest on barrier islands and forage in nearshore waters of Alaska Beaufort Sea.					--	--
	Arctic Terns	--	Nest on barrier islands and forage in nearshore lagoons and offshore waters.					--	--
	Shorebirds	--	May be observed in lagoon areas throughout summer; feed in coastal mud flats and along shorelines. Large numbers of post-breeding phalaropes occur in lagoons and inner shorelines of barrier islands.					--	--
Threatened or Endangered Species	Spectacled Eider	--	Early arrival in spring.	Males leave tundra nesting grounds to feed in nearshore waters.	Females/young feed in nearshore waters before migration.	--	--	--	
	Steller's Eider	--	Individuals may occasionally be observed in the project area.						
	Arctic Peregrine Falcon	--	--	Forage along the Beaufort Sea coast.			--	--	
Outer Island Shorelines and Exposed Coast									
Marine Invertebrates	All	Same as lagoons and shorelines inside barrier islands.							
Fish	Char and Arctic Cisco	Migration and feeding unknown distance offshore.							
Marine and Terrestrial Mammals	Arctic Fox, Polar Bears, and Ringed Seals	Same as lagoons and shorelines inside barrier islands.							

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Outer Island Shorelines and Exposed Coast (Cont.)									
Migratory Birds	All	--	Spring and fall: migrating birds use leads and open water areas to stage and feed.					--	--
	Black Guillemots	--	Occur in small numbers in open waters of the Alaskan Beaufort Sea; nest on a few islands west of the project area.					--	--
	Lesser Snow Goose	--	--	Nest and brood-rearing on Howe Island.			--	--	--
	Common Eider, King Eider, Oldsquaw	--	Spring migration corridor.	Nest on barrier islands.			Fall migration corridor.	--	--
	Pomarine and Parasitic Jaegers	--	Found in the open water season in offshore waters and adjacent inland areas.					--	--
	Glaucous Gulls	--	Nest on barrier islands and forage in nearshore waters of Alaska Beaufort Sea.					--	--
	Arctic Terns	--	Nest on barrier islands and forage in nearshore lagoons and offshore waters.					--	--
Threatened or Endangered Species	Arctic Peregrine Falcon	--	--	Forage along the Beaufort Sea coast.				--	--
	Spectacled Eider	--	Spring and fall migration corridor.					--	--
Marine Waters and Sea Ice									
Marine Invertebrates	Phytoplankton	Present year-round; population bloom in late July to early August.							
	Zooplankton and Nekton	Present year-round; population bloom in August.							
	Epotonic Communities	Present year-round; population bloom in May; population declines as ice recedes.							
	Epifauna	Present year-round.							
	Infauna	Present year-round.							
Fish	Char	--	Feeding grounds during open water season.					--	--
	Arctic Cod	Present year-round.							
Marine Mammals	Beluga Whales	--	Migratory path to Canadian Beaufort Sea.	--	--	Migratory path back to Bering Sea.		--	

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Category	Species	April	May	June	July	August	September	October	November through March	
Marine Waters and Sea Ice (Cont.)										
Marine Mammals (Cont.)	Ringed Seal	Generally follow the ice pack north in the summer. Individuals may be observed during open water.						Concentrated close to shore in winter to feed and den.		
	Bearded Seals	--	Individuals may be observed in area during open water.						Generally follow the ice pack south in the winter; a few could be present in the project area between the shorefast ice and pack ice.	
	Polar Bears	Polar bears move with the advancing ice pack in winter and with the retreating ice pack during summer.								
Migratory Birds	King and Common Eider	--	Spring migration		--	Fall migration		--	--	
Threatened or Endangered Species	Bowhead Whales	--	Migratory path while traveling east.	--		Migratory path while traveling west.			--	