ОСТРОВА ПРИБЫЛОВА (АЛЯСКА)

Регион с чрезвычайной чувствительностью к загрязнению окружающей среды.

Острова Прибылова представляют собой один из наиболее чувствительных к загрязнению окружающей среды регионов Северной Америки. На протяжении более теплых месяцев, а именно, со середины мая по сентябрь, этот регион становится домом для примерно одного миллиона котиков и трех миллионов морских птиц. Пребывание котиков в данном регионе может длиться до самого декабря. В этот период появление здесь любого нефтяного пятна было бы экологической катастрофой.В другие времена года подобное явление может отрицательно повлиять на зимующую здесь фауну и последующее возвращение котиков.

На этом плакате представлены данные об основных видах животных и птиц, обитающих в данном регионе, включая их популяцию и сезонность. Для принятия мер в экстренных случаях приведена дополнительная информация о состоянии прибрежных районов в порядке возрастания степени чувствительности к загрязнению нефтью.

Сухопутная территория и большинство видов находящихся здесь животных и птиц охраняются различными законами: местными, штата и федеральными. Нанесение физического ущерба фауне и охота облагаются крупными штрафами. Просим обратить внимание на то, что для обеспечения спокойного пребывания котиков и гнездования птиц над данной территорией в период со середины мая до середины декабря устанавливается ЗОНА, ЗАКРЫТАЯ ДЛЯ ПОЛЕТОВ. Будучи потревожены, котики и птицы перемещаются с побережья в прибрежные воды, что увеличивает наносимый ущерб в случае загрязнения последних нефтью Просьба проявлять повышенную осторожность при прохождении этого региона морскими и воздушными судами и при нахождении на побережье.

プリビロフ島・アラスカ地域力

環境保護を大切にする

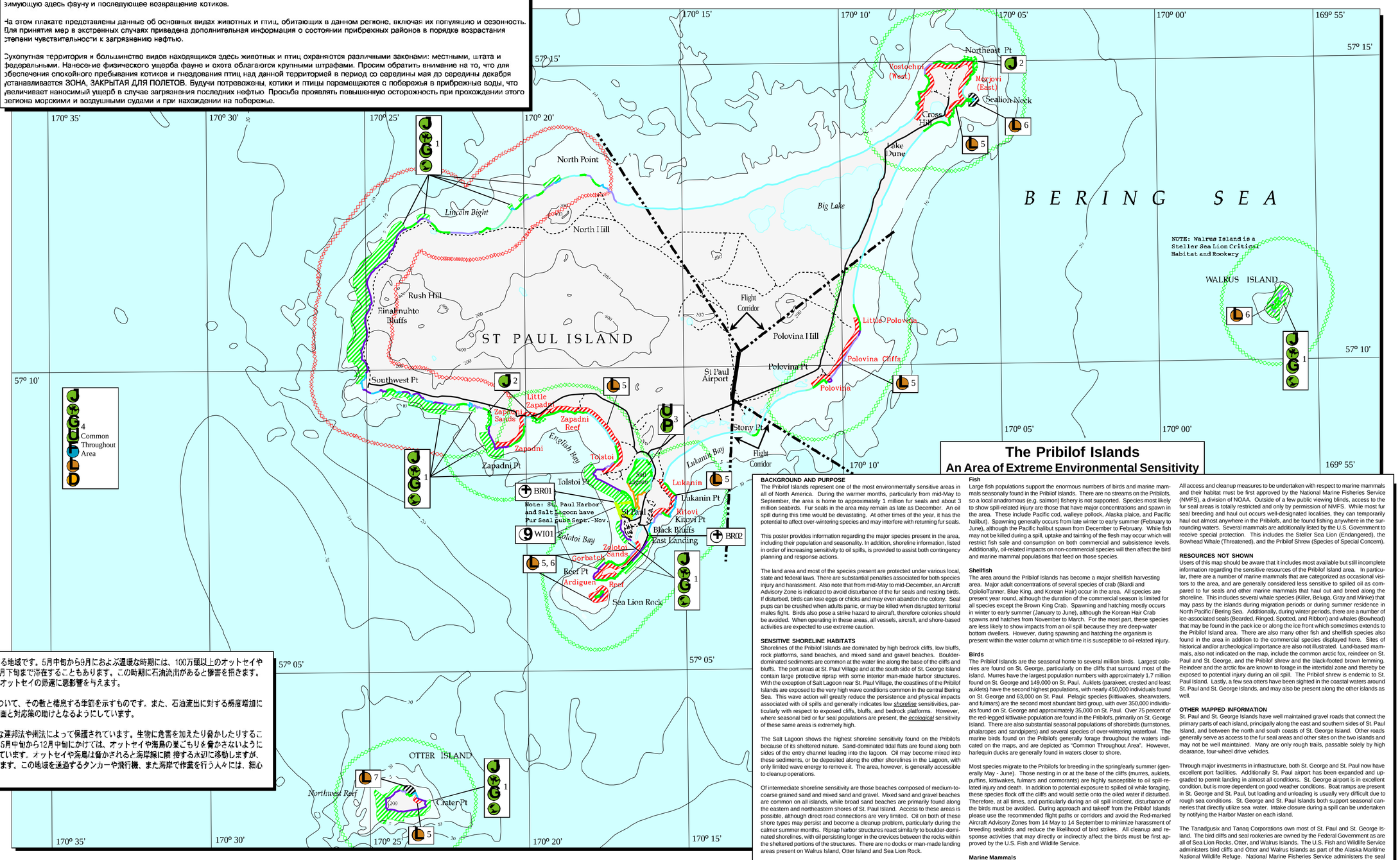
プリビロフ島は北米でも最も環境保護を大切にする地域です。5月中旬から9月におよぶ温暖な時期には、100万頭以上のオットセイや300万羽以上の海鳥が訪れます。オットセイは12月下旬まで滞在することもあります。この時期に石油流出があると惨害を招きます。またこれ以外の時期には、多くの生物の冬越えやオットセイの帰還に悪影響を与えます。

このポスターはこの地域に棲息する主な生物について、その数と棲息する季節を示すものです。また、石油流出に対する感度増加に従って海岸線についての情報をリストし、非常計画と対応策の助けとなるようにしています。

陸地とそこに棲息する生物のほとんどは、様々な連邦法や州法によって保護されています。生物に危害を加えたり脅かしたりすることに対しては、多大な罰則が適用されます。また5月中旬から12月中旬にかけては、オットセイや海鳥の巣ごもりを脅かさないように「NO FLY ZONE（飛行禁止区域）」が設定されています。オットセイや海鳥は脅かされると海岸線に簡 接する水辺に移動しますが、石油の流出があると損害がさらに広がってしまいます。この地域を通過するタンカーや飛行機、また海岸で作業を行う人々には、細心の注意を払うようことが求められています。

Pribilof Islands, Alaska
Environmentally Sensitive Areas

(Seal Islands National Historic Landmark and part of the Alaska Maritime National Wildlife Refuge)



The Pribilof Islands
An Area of Extreme Environmental Sensitivity

BACKGROUND AND PURPOSE

The Pribilof Islands represent one of the most environmentally sensitive areas in all of North America. During the warmer months, particularly from mid-May to September, the area is home to approximately 1 million fur seals and about 3 million seabirds. Fur seals in the area may remain as late as December. An oil spill during this time would be devastating. At other times of the year, it has the potential to affect over-wintering species and may interfere with returning fur seals.

This poster provides information regarding the major species present in the area, including their population and seasonality. In addition, shoreline information, listed in order of increasing sensitivity to oil spills, is provided to assist both contingency planning and response actions.

The land area and most of the species present are protected under various local, state and federal laws. There are substantial penalties associated for both species injury and harassment. Also note that from mid-May to mid-December, an Aircraft Advisory Zone is indicated to avoid disturbance of the fur seals and nesting birds. If disturbed, birds can lose eggs or chicks and may even abandon the colony. Seal pups can be crushed when adults panic, or may be killed when disrupted territorial males fight. Birds also pose a strike hazard to aircraft, therefore colonies should be avoided. When operating in these areas, all vessels, aircraft, and shore-based activities are expected to use extreme caution.

SENSITIVE SHORELINE HABITATS

Shorelines of the Pribilof Islands are dominated by high bedrock cliffs, low bluffs, rock platforms, sand beaches, and mixed sand and gravel beaches. Boulder-dominated sediments are common at the water line along the base of the cliffs and bluffs. The port areas at St. Paul Village and at the south side of St. George Island contain large protective riprap with some interior man-made harbor structures. With the exception of Salt Lagoon near St. Paul Village, the coastlines of the Pribilof Islands are exposed to the very high wave conditions common in the central Bering Sea. This wave action will greatly reduce the persistence and physical impacts associated with oil spills and generally indicates low *shoreline* sensitivities, particularly with respect to exposed cliffs, bluffs, and bedrock platforms. However, where seasonal bird or fur seal populations are present, the *ecological* sensitivity of these same areas is extremely high.

The Salt Lagoon shows the highest shoreline sensitivity found on the Pribilofs because of its sheltered nature. Sand-dominated tidal flats are found along both sides of the entry channel leading into the lagoon. Oil may become mixed into these sediments, or be deposited along the other shorelines in the Lagoon, with only limited wave energy to remove it. The area, however, is generally accessible to cleanup operations.

Of intermediate shoreline sensitivity are those beaches composed of medium-to-coarse grained sand and mixed sand and gravel. Mixed sand and gravel beaches are common on all islands, while broad sand beaches are primarily found along the eastern and northeastern shores of St. Paul Island. Access to these areas is possible, although direct road connections are very limited. Oil on both of these shore types may persist and become a cleanup problem, particularly during the calmer summer months. Riprap harbor structures react similarly to boulder-dominated shorelines, with oil persisting longer in the crevices between the rocks within the sheltered portions of the structures. There are no docks or man-made landing areas present on Walrus Island, Otter Island and Sea Lion Rock.

Areas having the lowest physical sensitivity to oil include shorelines dominated by high and low bluffs. Cleanup access to the shoreline from the cliffs is very limited and dangerous, but is generally possible in low bluff areas. Both shoreline types commonly have boulder-dominated rubble at the water's edge along the base of the cliff or bluff. Mixed in with the cliffs and bluffs are short stretches of shoreline having a bedrock platform or ledge.

SENSITIVE BIOLOGICAL RESOURCES

The spatial distribution of marine species potentially exposed to an oil spill or related disturbance are indicated as polygons or points. The species icon(s) and associated number depict the type of species present as referenced in the Biological Resources Table. To avoid excessive clutter, species common to the waters surrounding the Pribilofs are identified by a box labeled "Common Throughout Area".

The Biological Resources Table uses the following terminology, now common to all sensitivity mapping projects undertaken by the National Oceanic and Atmospheric Administration (NOAA). The first column (RAR#) provides the Resources at Risk Number which links the table to the point or polygon on the map, followed by species name. The third and forth columns refer to the species' listing as a state (S) and/or federal (F), endangered (E) or threatened (T) species. In cases where a federal threatened or endangered species is listed by the State of Alaska as a "Species of Special Concern", then the state designation is considered to be the same as the federal. The fifth column provides an estimate of the Concentration of each species. Concentrations, when known, are listed as 'HIGH', 'MED', OR 'LOW', based on population studies of the area and expert opinion. Species presence is indicated in the next 12 columns representing months of the year. The last columns provide life history information.

Fish

Large fish populations support the enormous numbers of birds and marine mammals seasonally found in the Pribilof Islands. There are no streams on the Pribilofs, so a local anadromous (e.g. salmon) fishery is not supported. Species most likely to show spill-related injury are those that have major concentrations and spawn in the area. These include Pacific cod, walleye pollock, Alaska plaice, and Pacific halibut). Spawning generally occurs from late winter to early summer (February to June), although the Pacific halibut spawn from December to February. While fish may not be killed during a spill, uptake and tainting of the flesh may occur which will restrict fish sale and consumption on both commercial and subsistence levels. Additionally, oil-related impacts on non-commercial species will then affect the bird and marine mammal populations that feed on those species.

Shellfish

The area around the Pribilof Islands has become a major shellfish harvesting area. Major adult concentrations of several species of crab (Biardi and OpioliiTanner, Blue King, and Korean Hair) occur in the area. All species are present year round, although the duration of the commercial season is limited for all species except the Brown King Crab. Spawning and hatching mostly occurs in winter to early summer (January to June), although the Korean Hair Crab spawns and hatches from November to March. For the most part, these species are less likely to show impacts from an oil spill because they are deep-water bottom dwellers. However, during spawning and hatching the organism is present within the water column at which time it is susceptible to oil-related injury.

Birds

The Pribilof Islands are the seasonal home to several million birds. Largest colonies are found on St. George, particularly on the cliffs that surround most of the island. Murres have the largest population numbers with approximately 1.7 million found on St. George and 149,000 on St. Paul. Auklets (parakeet, crested and least auklets) have the second highest populations, with nearly 450,000 individuals found on St. George and 63,000 on St. Paul. Pelagic species (kittiwakes, shearwaters, and fulmars) are the second most abundant bird group, with over 350,000 individuals found on St. George and approximately 35,000 on St. Paul. Over 75 percent of the red-legged kittiwake population are found in the Pribilofs, primarily on St. George Island. There are also substantial seasonal populations of shorebirds (turnstones, phalaropes and sandpipers) and several species of over-wintering waterfowl. The marine birds found on the Pribilofs generally forage throughout the waters indicated on the maps, and are depicted as "Common Throughout Area". However, harlequin ducks are generally found in waters closer to shore.

Most species migrate to the Pribilofs for breeding in the spring/early summer (generally May - June). Those nesting in or at the base of the cliffs (murres, auklets, puffins, kittiwakes, fulmars and cormorants) are highly susceptible to oil spill-related injury and death. In addition to potential exposure to spilled oil while foraging, these species flock off the cliffs and would settle onto the oiled water if disturbed. Therefore, at all times, and particularly during an oil spill incident, disturbance of the birds must be avoided. During approach and takeoff from the Pribilof Islands please use the recommended flight paths or corridors and avoid the Red-marked Aircraft Advisory Zones from 14 May to 14 September to minimize harassment of breeding seabirds and reduce the likelihood of bird strikes. All cleanup and response activities that may directly or indirectly affect the birds must be first approved by the U.S. Fish and Wildlife Service.

Marine Mammals

The Pribilof Islands have the greatest concentration of Northern Fur Seals in North America. The present population, although reduced from previous levels, has approximately 700,000 to 800,000 individuals on St. Paul Island and adjacent Sea Lion Rock, another 100,000 to 200,000 on St. George, and less than 1,000 on Otter Island. This represents approximately 70 percent of the world's Northern Fur Seal population. Fur seal rookeries and haul out areas are found on sand beaches, mixed sand and gravel beaches, and in low bluff areas. The Steller Sea Lion population is much smaller in number and is decreasing. Less than 1,000 breeding animals are found on Walrus Island, the remaining islands have specific haulouts that may contain up to 200 individuals at any given time. Low numbers of Harbor seals are found to haul out on all the islands and to breed on Otter Island. Sea otters have been sighted around St. Paul and St. George Islands, but are not common. The latter three species are year-round residents, while fur seals have distinct seasons, arriving in May/June and leaving beginning in November, although pups and some adults remain until December. Fur seals return each year to the same beaches of their birth.

Fur seals, and particularly fur seal pups, are especially susceptible to injury during an oil spill and related disturbances from the ground or air. Fur seals use the water for a source of food as well as a refuge when threatened. Spilled oil coats the fur of the animal and may cause death, particularly of the new born pups. Oiling also causes eye irritation and damage. If disturbed, pups and even small males or females animals are likely to be trampled to death as the herd escapes to the water. During approach and takeoff from the Pribilof Islands please use the recommended flight paths or corridors and avoid the Green-marked Aircraft Advisory Zones from 1 June to 14 December to minimize harassment of northern fur seals.

All access and cleanup measures to be undertaken with respect to marine mammals and their habitat must be first approved by the National Marine Fisheries Service (NMFS), a division of NOAA. Outside of a few public viewing blinds, access to the fur seal areas is totally restricted and only by permission of NMFS. While most fur seal breeding and haul out occurs well-designated localities, they can temporarily haul out almost anywhere in the Pribilofs, and be found fishing anywhere in the surrounding waters. Several mammals are additionally listed by the U.S. Government to receive special protection. This includes the Steller Sea Lion (Endangered), the Bowhead Whale (Threatened), and the Pribilof Shrew (Species of Special Concern).

RESOURCES NOT SHOWN

Users of this map should be aware that it includes most available but still incomplete information regarding the sensitive resources of the Pribilof Island area. In particular, there are a number of marine mammals that are categorized as occasional visitors to the area, and are generally considered less sensitive to spilled oil as compared to fur seals and other marine mammals that haul out and breed along the shoreline. This includes several whale species (Killer, Beluga, Gray and Minke) that may pass by the islands during migration periods or during summer residence in North Pacific / Bering Sea. Additionally, during winter periods, there are a number of ice-associated seals (Bearded, Ringed, Spotted, and Ribbon) and whales (Bowhead) that may be found in the pack ice or along the ice front which sometimes extends to the Pribilof Island area. There are also many other fish and shellfish species also found in the area in addition to the commercial species displayed here. Sites of historical and/or archeological importance are also not illustrated. Land-based mammals, also not indicated on the map, include the common arctic fox, reindeer on St. Paul and St. George, and the Pribilof shrew and the black-footed brown lemming. Reindeer and the arctic fox are known to forage in the intertidal zone and thereby be exposed to potential injury during an oil spill. The Pribilof shrew is endemic to St. Paul Island. Lastly, a few sea otters have been sighted in the coastal waters around St. Paul and St. George Islands, and may also be present along the other islands as well.

OTHER MAPPED INFORMATION

St. Paul and St. George Islands have well maintained gravel roads that connect the primary parts of each island, principally along the east and southern sides of St. Paul Island, and between the north and south coasts of St. George Island. Other roads generally serve as access to the fur seal areas and other sites on the two islands and may not be well maintained. Many are only rough trails, passable solely by high clearance, four-wheel drive vehicles.

Through major investments in infrastructure, both St. George and St. Paul now have excellent port facilities. Additionally St. Paul airport has been expanded and upgraded to permit landing in almost all conditions. St. George airport is in excellent condition, but is more dependent on good weather conditions. Boat ramps are present in St. George and St. Paul, but loading and unloading is usually very difficult due to rough sea conditions. St. George and St. Paul Islands both support seasonal canneries that directly utilize sea water. Intake closure during a spill can be undertaken by notifying the Harbor Master on each island.

The Tanadgusix and Tanaq Corporations own most of St. Paul and St. George Island. The bird cliffs and seal rookeries are owned by the Federal Government as are all of Sea Lion Rocks, Otter, and Walrus Islands. The U.S. Fish and Wildlife Service administers bird cliffs and Otter and Walrus Islands as part of the Alaska Maritime National Wildlife Refuge. National Marine Fisheries Service administers the seal rookeries.

DATA SOURCES AND ACKNOWLEDGEMENTS

Most of the data used for this map are derived from published sources and updated by scientists actively working in the Pribilof Islands. Primary sources of ecological data include: Bering, Chukchi, and Beaufort Seas, Strategic Assessment Data Atlas, NOAA - National Ocean Service, 1988; NOAA, Fur Seal Investigations, 1994 (Sinclair, ed); The Bering Sea Ecosystem, 1996, National Academy Press; and the Catalog of Alaskan Seabirds, U.S. Fish and Wildlife Service, 1978.

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Shoreline topography and bathymetry are from NOAA Nautical Charts 16381 and 16382. Erich Gundlach with the support of reviewers completed the shoreline characterization using aerial photographs, aerial video (conducted by NMFS) and ground surveys primarily on St. Paul Island. Marshal Kendzierek developed the map format and design with Sheila Corey using a Geographic Information System

SEASONALITY AND LIFE HISTORY TABLES (see text for further explanation)

BIRD:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Laying	Hatching	Fledging
1	Common Murre			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	JUN-JUL	JUL-AUG	AUG-SEP
	Thick-billed Murre			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	JUN-JUL	JUL-AUG	AUG-SEP
	Horned Puffin			MED					X	X	X	X	X				JUN-JUL	JUN-JUL	JUL-AUG	SEP
	Tufted Puffin			MED					X	X	X	X	X				JUN-JUL	JUN-JUL	JUL-AUG	SEP
	Parakeet Auklet			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	JUN-JUL	JUL-AUG	JUL-SEP
	Red-faced Cormorant			LOW	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	APR-MAY	JUN-JUL	AUG-SEP
	Crested Auklet			MED	X	X	X	X	X	X	X	X	X				MAY	MAY	JUN	JUL
	Red-legged Kittiwake			HIGH					X	X	X	X	X				JUN-JUL	JUN-JUL	AUG	AUG-SEP
	Black-legged Kittiwake			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	JUN-JUL	JUL-AUG	AUG-SEP
	Northern Fulmar			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-SEP	JUN-SEP	JUL-AUG	SEP
	Grey-crowned Rosy Finch			LOW	X	X	X	X	X	X	X	X	X	X	X	X	MAY	MAY	JUN	JUL
	Winter Wren			LOW	X	X	X	X	X	X	X	X	X	X	X	X	MAY	MAY	JUN	JUL
	Glaucous-winged Gull			LOW	X	X	X	X	X	X	X	X	X	X	X	X				
	Glaucous Gull			LOW	X	X	X	X	X	X	X	X	X	X	X	X				
	Least Auklet			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY	MAY	JUN	JUL
2	Least Auklet			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY	MAY	JUN	JUL
3	Ruddy Turnstone										X	X								
	Red-necked Phalarope								X	X	X	X	X				MAY-JUN	MAY-JUN	MAY-JUN	JUL-AUG
	Rock Sandpiper								X	X	X	X	X				MAY	MAY	JUN	JUL
	Pintail				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	MAY-JUN	JUN-JUL	AUG-SEP
	Common Goldeneye				X	X	X	X						X	X	X				
	Barrows Goldeneye				X	X	X	X						X	X	X				
	Oldsquaw				X	X	X	X	X	X	X					X	MAY-JUN	MAY-JUN	JUN-JUL	AUG-SEP
4	Common Murre			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	JUN-JUL	JUL-AUG	AUG-SEP
	Thick-billed Murre			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	JUN-JUL	JUL-AUG	AUG-SEP
	Horned Puffin			MED					X	X	X	X	X				JUN-JUL	JUN-JUL	JUL-AUG	SEP
	Tufted Puffin			MED					X	X	X	X	X				JUN-JUL	JUN-JUL	JUL-AUG	SEP
	Parakeet Auklet			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	JUN-JUL	JUL-AUG	JUL-SEP
	Red-faced Cormorant			LOW	X	X	X	X	X	X	X	X	X	X	X	X	APR-MAY	APR-MAY	JUN-JUL	AUG-SEP
	Crested Auklet			MED	X	X	X	X	X	X	X						MAY	MAY	JUN	JUL
	Red-legged Kittiwake			HIGH					X	X	X	X	X				JUN-JUL	JUN-JUL	AUG	AUG-SEP
	Black-legged Kittiwake			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	JUN-JUL	JUN-JUL	JUL-AUG	AUG-SEP
	Winter Wren			LOW	X	X	X	X	X	X	X	X	X	X	X	X	MAY	MAY	JUN	JUL
	Glaucous-winged Gull			HIGH	X	X	X	X	X	X	X	X	X	X	X	X				
	Glaucous Gull			HIGH	X	X	X	X	X	X	X	X	X	X	X	X				
	Red-necked Phalarope								X	X	X	X	X				MAY-JUN	MAY-JUN	MAY-JUN	JUL-AUG
	Sooty Shearwater									X	X	X	X	X						
	Short-tailed Shearwater									X	X	X	X	X						
	Pintail				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	MAY-JUN	JUN-JUL	AUG-SEP
	Green-winged Teal				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	MAY-JUN	JUN-JUL	AUG-SEP
	Common Goldeneye				X	X	X	X						X	X	X				
	Barrows Goldeneye				X	X	X	X						X	X	X				
	Bufflehead				X	X	X	X						X	X	X				
	Oldsquaw				X	X	X	X	X	X	X					X	MAY-JUN	MAY-JUN	JUN-JUL	AUG-SEP
	Harlequin Duck				X	X	X	X	X	X	X	X	X	X	X	X				
	White-winged Scoter				X	X	X	X								X				
	Surf Scoter				X	X	X	X								X				
	Black Scoter				X	X	X	X								X				
	Common Eider				X	X	X	X	X	X	X	X	X	X	X	X				
	King Eider				X	X	X	X	X	X	X	X	X	X	X	X				
	Steller's Eider	S/F	T		X	X	X	X								X				
	Spectacled Eider	S/F	T		X	X	X	X								X				

FISH:

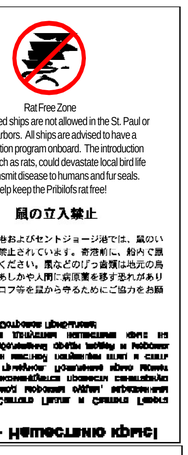
RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Outmig	Larvae	Juveniles	Adults
4	Rock Sole								X	X	X	X	X	X	X		MAR-JUN	NOV	MAR-JUN	MAY-NOV	MAY-NOV
	Pacific Cod				X	X	X	X	X	X	X	X	X	X	X	X	FEB-APR	-	FEB-MAY	JAN-DEC	JAN-DEC
	Walleye Pollock				X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	-	FEB-JUL	JAN-DEC	JAN-DEC
	Pacific Herring				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUN	-	APR-JUL	JAN-DEC	JAN-DEC
	Alaska Plaice				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	-	MAY-JUN	JAN-DEC	JAN-DEC
	Arrowtooth Flounder				X	X	X	X	X	X	X	X	X	X	X	X	DEC-APR	-	DEC-MAY	JAN-DEC	JAN-DEC
	Greenland turbot				X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAR	-	FEB-APR	JAN-DEC	JAN-DEC
	Pacific Halibut				X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	-	DEC-MAR	JAN-DEC	JAN-DEC
	Yellowfin Sole								X	X	X	X	X	X	X		JUL-AUG	NOV	JUL-SEP	JUL-NOV	MAY-NOV

INVERTEBRATE:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Larvae	Mating	Juveniles	Adults
4	Bairdi Tanner Crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	JAN-JUN	JAN-MAY	JAN-DEC	JAN-DEC
	Blue King Crab				X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	FEB-JUL	FEB-JUN	JAN-DEC	JAN-DEC
	Korean Hair Crab				X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAR-JUN	AUG-FEB	JAN-DEC	JAN-DEC
	Korean Hair Crab				X	X	X	X	X	X	X	X	X	X	X	X	OCT-NOV	OCT-DEC	AUG-FEB	JAN-DEC	JAN-DEC
	Opiolio Tanner Crab				X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	FEB-JUN	FEB-MAY	JAN-DEC	JAN-DEC
	Red King Crab				X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	FEB-JUL	FEB-JUN	JAN-DEC	JAN-DEC

MARINE MAMMAL:

RAR#	Species	S/F	T/E	Concen	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping
4	Northern Fur Seal			HIGH					X	X	X	X	X	X	X	X	JUN-AUG		JUN-AUG
	Steller Sea Lion	S/F	E	LOW	X	X	X	X	X	X	X	X	X	X	X	X			MAY-JUL
	Pacific Harbor Seal			LOW	X	X	X	X	X	X	X	X	X	X	X	X			JUN-JUL
5	Northern Fur Seal			HIGH					X	X	X	X	X	X	X	X	JUN-AUG		JUN-AUG
6	Steller Sea Lion	S/F	E	LOW	X	X	X	X	X	X	X	X	X	X	X	X			MAY-JUL
7	Pacific Harbor Seal			LOW	X	X	X	X	X	X	X	X	X	X	X	X			JUN-JUL

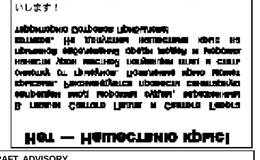


Rat Free Zone

Rodent infested ships are not allowed in the St. Paul or St. George harbors. All ships are advised to have a rodent prevention program onboard. The introduction of rodents, such as rats, could devastate local bird life and could transmit disease to humans and fur seals. Help keep the Pribilofs rat free!

鼠の立入禁止

セントポール港およびセントジョージ港では、鼠のいる船の停泊がさされています。寄港前に、船内で鼠退治を行ってください。鼠などの生息種は地元の鳥類を食かし、あしかや人間に病原菌を移す恐れがあります。プリビロフ等を鼠から守るためにご協力をお願いします！



AIRCRAFT ADVISORY

The National Marine Fisheries Service and U.S. Fish and Wildlife Service requests pilots maintain a minimum altitude of 1,000 feet above ground level (AGL) within a one mile radius of any of the coastline of the Pribilof Islands (St. Paul, St. George, Sea Lion Rock, Walrus and Otter Islands) from 14 May until 14 December. Flights less than 1,000 feet AGL and less than one mile seaward or ½ mile landward may harass marine mammals and seabirds. Harassment of wildlife may increase the incidence of bird strikes and violate the Marine Mammal Protection Act.

During approach and takeoff from St. George to the east a right bank turn is recommended between ½ and one mile from the end of the runway to heading 060°T or 240°T along the 200 foot contour. The recommended route to the west is a left bank within one mile from the end of the runway to the west aircraft corridor heading 060°T or 240°T. During approach and takeoff from St. Paul follow aircraft advisory corridors to the north and south. Inter-island flights along heading 138°T or 318°T should avoid the aircraft advisory zones if less than 1,000 feet AGL and within one mile of any coastline except as recommended above.

Key to Icons

BIRDS
- J Alcid / Pelagic
- D Diving Bird
- G Gull / Tern
- P Passerine
- S Shorebird
- W Waterfowl

FISH
- F

MARINE MAMMALS
- L Seal / Sea Lion

INVERTEBRATES
- C Crab

HUMAN USE RESOURCES
- Boat Ramp
- 9 Water Intake

HUMAN USE RESOURCES:

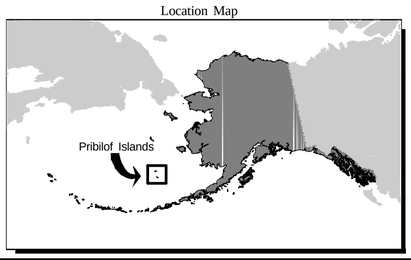
BOAT RAMP:

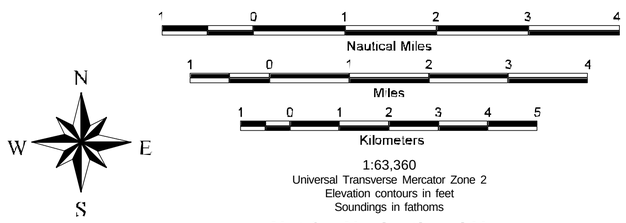
RAR#	Name	Contact	Phone
BR01	St. Paul Harbor	Harbor Master	(907) 546-3140
BR02	East Landing , St. Paul	Harbor Master	(907) 546-3140
BR03	St. George Village	Harbor Master	(907) 859-2488
BR04	St. George Harbor	Harbor Master	(907) 859-2488

WATER INTAKE

RAR#	Name	Contact	Phone
WI01	St. Paul Harbor	Harbor Master	(907) 546-3140
WI02	St. George Village	Harbor Master	(907) 859-2488

Location Map





1:63,360
Universal Transverse Mercator Zone 2
Elevation contours in feet
Soundings in fathoms

Not for Navigational Use

Key to Sensitive Resources

SENSITIVE SHORELINE RESOURCES
(in order of increasing sensitivity)
- High rocky cliffs, mostly with boulder talus base (ESI 1A)
- Low bluffs with boulder talus base (ESI 1B)
- Exposed wave-cut platform or bedrock ledge (ESI 2)
- Sand beach - primarily medium to coarse sand (ESI 4)
- Mixed sand and gravel beach (ESI 5)
- Cobble / boulder beach (ESI 6A)
- Riprap with some man-made structures (ESI 6B)
- Sheltered sand tidal flat (ESI 9)

SENSITIVE BIOLOGICAL RESOURCES
- Least Auklet concentrations
- Fur seal rookeries and haulout areas
- Fur seal pup concentration areas September to December
- Steller Sealion and Harbor Seal rookeries and haulout areas

High Medium Low
Bird Concentration

See text and tables for bird species and numbers

HUMAN USE and OTHER FEATURES
- Aircraft Advisory Zone: 1 June 14 September 1 mile seaward, 1/2 mile landward, 1000 ft AGL
- Aircraft Advisory Zone: 14 May - 14 December 1 mile seaward, 1/2 mile landward, 1000 ft AGL
- Requested Aircraft Flight Path
- Primary roads
- Secondary roads and trails
- Kilovi Fur seal rookery name

4 Common Throughout Area

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United States Coast Guard 17th District
and
National Oceanographic and Atmospheric Administration