Rocks, Reefs, and Islands within San Juan Islands National Wildlife Refuge

This document provides information on the locations, habitat types, wildlife, wilderness status, and physical attributes of the various rocks, reefs, and islands contained within San Juan Islands National Wildlife Refuge. Aerial photographs provide an additional identification aid. The numbering system of the 83 rocks, reefs, and islands contained within the refuge was first established in the San Juan Islands Wilderness Proposal of August 28, 1971, and has been retained and used in several subsequent publications and research databases. All units of the refuge lie within the San Juan archipelago, with the exception of Smith and Minor Islands, which are located approximately seven miles south of Lopez Island. Because of the limited availability of the habitat preserved and the intent to provide an undisturbed haven for wildlife, all but Turn and Matia Islands are closed to public use. The San Juan Islands Wilderness was established on October 19, 1976, by public law 94-577. All the islands within the refuge, except for Smith, Minor, Turn, and five acres of Matia Island, are designated wilderness.

The information within this document was gathered from several sources and has been narrowed to provide a few of the most vital statistics. Physical descriptions of the islands were obtained from the San Juan Islands Wilderness Proposal of August 28, 1971. Data pertaining to wildlife species, plant species, and overall habitat types found on the islands were collected through a series of surveys conducted by refuge staff between 2000 and 2009. Observations collected by the Whale Museum's Soundwatch program in 1997 were also consulted on these topics. Latitude and longitude coordinates and island acreages were provided by the Region 1 Realty and Information Branch of the USFWS. Information on navigational aids was compiled from the U.S. Coast Guard 13th District Management Branch 2009 Aid Assignment List and verified using National Oceanic and Atmospheric Administration Electronic Navigational Charts from 2008-2009 and the observations of refuge staff. Although much of the provided information is dynamic and may fluctuate with time, this document was compiled to provide a brief reference to the resources managed within the refuge.

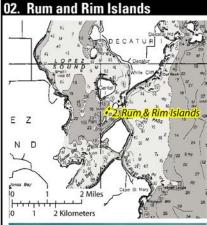




48° 29' 43" N, 122° 51' 48" W



This is a very low, flat, rocky 0.329 acre wilderness island approximately 200 to 300 yards offshore of Lopez Island. The habitat structure primarily consists of consolidated rock with very sparse vegetation bordered by a sandy and gravelly shoreline. Wildlife present on this island in 2009 included swallows, black turnstones, black oystercatchers, and double-crested cormorant. Wildlife with young present on the island in 2009 included harbor seals and glaucous-winged gulls. From 2000-2004 black oystercatchers, double crested cormorants, and harbor seals were recorded here.







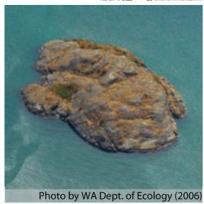
These are the northern two islands in the Ram Island group, which is located near the west entrance to Lopez Pass. The northernmost island, Rim Island, has a low-profile. The second island, Rum Island, is separated from the first by about 50 yards of water, although they may be connected by a submerged reef. Together they total 1.777 acres. Rum and Rim Islands are designated wilderness. The third island in the group is privately owned. Habitat consists of rocky shoreline surrounding an herbaceous bald interior. Tree species occurring in a limited woodland on Rum Island include Garry oak, madrone, and Douglas fir. Wildlife present on the islands in 2009 included pelagic cormorant, harbor seals, and black oystercatchers. Between 2000 and 2004 black oystercatchers and harbor seals were present on these islands

03. Fortress Island

48° 27' 55" N, 122° 50' 18" W



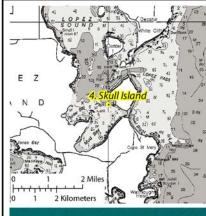




This somewhat dome-shaped wilderness island located in Lopez Sound about a half mile to the northeast of Crab Rocks is 2.324 acres. It rises to an elevation of about 100 feet above sea level, has precipitous slopes on all sides, and is surrounded by deep water. The habitat structure is mainly rocky shoreline and herbaceous bald. Willow, wild rose, ocean-spray, snowberry, reindeer moss, stonecrop, and prickly pear cactus have been recorded on this island. In 2009 no wildlife were observed on this island. However harbor seals were found here between 2000 and 2004.

04. Skull Island

48° 27' 57" N, 122° 49' 59" W





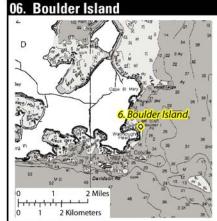


Skull Island is a low profile wilderness island about 200 yards off Lopez Island and 300 yards to the northeast of Fortress Island. It is 0.194 acres in size. The habitat consists of rocky shoreline with some grasses and sedum. Wildlife present on the island in 2009 included harbor seals and great blue heron. In 2000 through 2004 black oystercatchers and harbor seals were present.





Crab Island is a very low and rocky wilderness island extending just a few feet above water. It is 0.717 acres in size and separated from Lopez Island by about 100 yards of deep water. The habitat structure is primarily rocky shoreline excepting areas where pockets of soil enable the limited growth of gumweed and some grasses. In 2009 wildlife surveys found double-crested cormorant, great blue heron, and glaucous-winged gulls. Wildlife with young in 2009 included harbor seals and black oystercatchers. Harbor seals and black oystercatchers were recorded in surveys between 2000 and 2004.







This wilderness island is a circular, dome-shaped island, with a narrow, rocky point projecting from its south end. A small, gravelly pocket beach exists adjacent to the narrow rocky point. It is located at the south entrance to Watmough Bay, separated from Lopez Island by about 100 yards of deep water, and is 6.558 acres. Its habitat structure is made up of rocky shoreline, sandy and gravelly shoreline, and herbaceous bald. Some scattered Douglas fir occur, mixed with wild rose, ocean-spray, gumweed, yarrow, goose tongue, sea thrift, and grasses. Glaucous-winged gulls were present on Boulder Island in 2009. From 2000 to 2004 glaucous-winged gulls, harbor seals, and pigeon guillemots were present.

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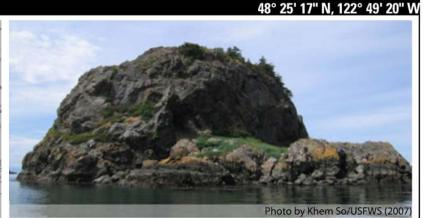




At high tide this wilderness island nearly submerges completely beneath water. It is located 600 yards east of Colville Island and is 0.006 acres. The island's habitat is reef. The navigational aid Davidson Rock Light "1" is located here. 2005 surveys found glaucous-winged gulls, double-crested cormorants, and harbor seals present on the rock. In the years 2000 to 2004 double-crested cormorants, pelagic cormorants, and harbor seals were found here.

2 Kilometers

08. Castle Island

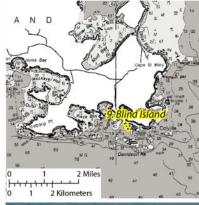




Castle Island is an 8.130 acre wilderness island situated north of Colville Island and near the shore of Lopez Island. It is roughly triangular in shape with its north and southeast sides almost vertical cliffs. The west side, though less steeply inclined, can be climbed only with difficulty. The habitat on this island includes rocky shoreline, cliffs, and herbaceous bald. Douglas fir, shore pine, elderberry, salal, and grasses growing in the shallow soil were recorded here. In 2009, wildlife present on the island included turkey vultures, bald eagles, and black oystercatchers. Wildlife with young in 2009 included pigeon guillemots. Between 2000 and 2004, harbor seals, pelagic cormorants, and pigeon guillemots were present.

09. 3 Unnamed Islands (Blind Island)





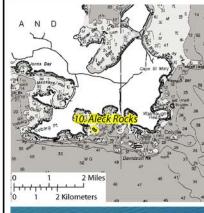




This group consists of three wilderness islets located immediately west of Castle Island. Blind Island, the northernmost island, is the largest and circular in shape. The middle island is 20 to 30 yards to the southeast. The southern-most island is about 60 to 70 yards southeast of the middle one and is somewhat higher; it has rather precipitous sides and is fairly level on top. Together the acreage for this group is 2.126. The habitat structure of these islets consists of rocky shoreline and herbaceous bald. The middle rock is devoid of vegetation while the other two have low-growing vegetation. In 2009 pigeon guillemot, marbled murrelets, glaucous-winged gulls, and harbor seals were present on the islands. Black oystercatchers and harbor seals were present here from 2000 to 2004.

10. Aleck Rocks

48° 25' 22" N, 122° 50' 60" W



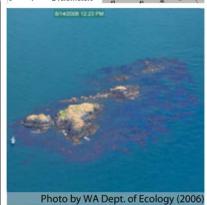




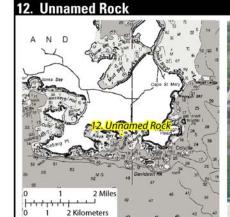
This includes two groups of rocky wilderness islets situated in the south side of the entrance to Aleck Bay. The islets appear as a low-profile 3.673 acre island extending about 20 feet above water. It is dissected roughly north to south by a low, craggy depression which is underwater at high tides. Small pocket beaches exist at lower tides. Herbaceous bald, rocky shoreline, and sandy, gravelly shoreline comprise the habitats found here. In 2009 no wildlife were observed on this island, but between 2000 and 2004 both black oystercatchers and harbor seals were observed.

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Swirl Island is the visible portion of a long wilderness reef which trends northwest to southeast. It is located about 450 yards south of Aleck Rocks. Its habitat structure is rocky shoreline with very sparse vegetation. The area exposed at high tide totals 2.303 acres. Wildlife present on the island in 2009 included Heermann's gulls, glaucous-winged gulls, black oystercatchers, bald eagles, and harbor seals. Black oystercatchers, harlequin ducks, and harbor seals were counted in surveys conducted between 2000 and 2004.



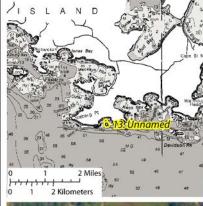




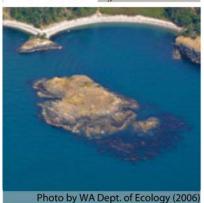
This is a single, unvegetated, 0.064 acre wilderness rock with a habitat described as rocky shoreline. It is located offshore a short distance in Hughes Bay at the southeast end of Lopez Island. Wildlife have not been observed here during survey efforts.

13. 4 Unnamed Islands

48° 25' 11" N, 122° 52' 5" W



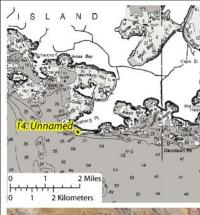




This is a circular, low-profile wilderness island with two or three small bare rocks nearby. The total acreage is 3.407 acres. It is separated from Lopez Island by about 200 yards of deep water. The habitat structure of this island includes herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. There is a small Douglas fir stand on the north island. In 2009 harbor seals and glaucous-winged gulls were present. From 2000 to 2004 harbor seals and black oystercatchers were recorded.

14. 3 Unnamed Islands

48° 25' 6" N, 122° 53' 10" W







These are rocky wilderness islets that are obviously part of a submerged reef extending off the south end of a small point along the shoreline of Lopez Island. They are 0.591 acres in size. The habitat structure here is rocky shoreline. The 2009 survey found Heermann's gulls, glaucouswinged gulls, great blue herons, greater yellowlegs, and black oystercatchers present. Harbor seals were recorded here from 2000 to 2004.

15. Hall Island 48° 26' 6" N, 122° 54' 43" W







Hall Island is a low-profile wilderness island rising about 25 feet above sea level. It is located about 605 yards south of Charles Island and is 4.701 acres. The island's habitat consists of rocky shoreline, sandy, gravelly shoreline, and herbaceous bald. In 2009 wildlife present on the island included rock sandpipers, Heermann's gulls, harlequin ducks, and black oystercatchers. Wildlife found with young in 2009 includes harbor seals and glaucous-winged gulls. Black oystercatchers, double-created cormorants, glaucous-winged gulls, harlequin ducks, and harbor seals were present for surveys from 2000 to 2004.

16. Unnamed Island









This low-profile wilderness island rises only a few feet above high tide. It is located about 205 yards west of Hall Island and is 0.467 acres. Its habitat is primarily rocky shoreline. In 2009 Heermann's gulls, harlequin ducks, glaucous-winged gulls, black turnstones, black oystercatchers, and harbor seals were present on the island. Between 2000 and 2004 black oystercatchers and harbor seals were recorded here.

17. Secar Rock 48° 26' 16" N, 122° 54' 25" W







Secar Rock is a low-profile wilderness island rising 15 feet above high tide. It is located midway between Charles and Hall Islands. The majority of this 1.302 acre island is comprised of rocky shoreline habitat. In 2009 no wildlife were observed on the island. However between 2000 and 2004 black oystercatchers, double-crested cormorants, glaucouswinged gulls, harlequin ducks, harbors seals, and pigeon guillemots were observed.

18. Unnamed Island (Round Rock)







The exposed portion of this wilderness island rises 12 feet above sea level and is located about 375 yards east of Charles Island and immediately northeast of Secar Rock. The habitat structure of this 0.616 acre island is rocky shoreline. In 2009 harbor seals and black oystercatchers were present on the island. From 2000 to 2004 black oystercatchers, double-crested cormorants, harlequin ducks, harbor seals, pelagic cormorants, and rhinoceros auklets were observed.

3 Unnamed Islats





This group consists of three rocky wilderness islets located just offshore and to the southeast of Long Island, to which they are connected by a submerged reef. The total acreage of this group is 2.082 acres. The primary habitat is rocky shoreline. Grasses occur on the largest islet while the other two islets have no vegetation. In 2009, black oystercatchers were present on these islets. Harbor seals were present between 2000 and 2004.



13 Unnamed Islets

48° 26' 17" N, 122° 55' 34" W

48° 26' 22" N, 122° 55' 9" W







This is a large group of small low-profile wilderness islets and rocks. They are located off the south shore of Long Island just west of the group described in number 19. Collectively they are 5.085 acres. Rocky shoreline makes up the primary habitat for this group although some grasses grow on the larger islets. Bald eagles were present on this group in 2009. Also in 2009 harbor seals were present with pups. Wildlife recorded between 2000 and 2004 included black oystercatchers, doublecrested cormorants, glaucous-winged gulls, harlequin ducks, harbor seals, and rhinoceros auklets.

21. Mummy Rocks S L A N D 24. Mummy Rocks

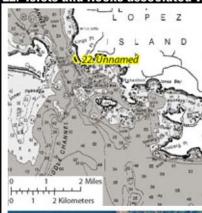




Mummy Rocks, located midway between Long Island and Point Davis on Lopez Island, consists of two low-profile wilderness islets with a habitat structure of rocky shoreline. They total 1.325 acres. In 2009 harlequin ducks, glaucous-winged gulls, and American crows were present on the islets. Also, harbor seals with pups were present in 2009. Between 2000 and 2004 black oystercatchers, double-crested cormorants, glaucous-winged gulls, harlequin ducks, and harbor seals were observed.



48° 27' 33" N, 122° 56' 35" W







This is a grouping of several wilderness islets and rocks northeast of Deadman Island. They are about 300 to 400 yards offshore from Lopez Island and separated from Deadman Island by 50 to 100 yards of deep water. They trend roughly north to south and together they total 1.822 acres. The habitat of this group is rocky shoreline. Harbor seals and glaucous-winged gulls were found here in 2009. From 2000 to 2004 black oystercatchers and harbor seals were found.





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This is a wilderness reef formation with two rocky tips exposed at high tide. It is situated 200 to 300 yards off of the west shore of Lopez Island, about 1.5 miles north of Point Davis, and is 0.160 acres. Harbor seal young were present in 2009. Harbor seals were also present between 2000 and 2004.

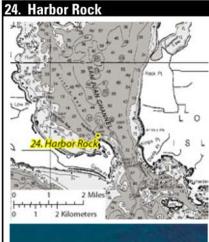


Photo by WA Dept. of Natural Resources

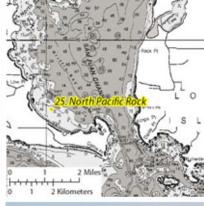




This is a low-profile wilderness rock with a habitat structure of rocky shoreline. It is located about 200 yards offshore of San Juan Island at the south side of Griffin Bay and is 0.558 acres. Black oystercatchers were present in 2009 along with harbor seals and their young. In 2000 through 2004 black oystercatchers, harlequin ducks, and harbor seals were present.

25. Unnamed Rock (North Pacific Rock)









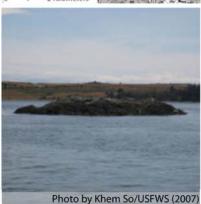
This is a low wilderness reef located off the east shore of San Juan Island in Griffin Bay that is submerged at maximum high tide. The habitat structure is classified as reef with an acreage of 0.022. In 2009 pelagic cormorants, glaucous-winged gulls, and double-crested cormorants were present on this reef. Harbor seals were observed from 2000 to 2004.

26. Halftide Rocks









These wilderness rocks are awash at high tide, thus leading to a habitat classification of reef. They are located about three quarters of a mile north of North Pacific Rock in Griffin Bay and total 0.133 acres in size. In 2009 Heermann's gulls and glaucous-winged gulls were present on the island. Harbor seals with pups were also present in 2009. Double-crested cormorants and harbor seals were observed from 2000 to 2004.

27. Unnamed islands 27. Unnamed islands





These are a series of wilderness islets which extend out from San Juan Island. They are midway between False Bay and Eagle Point. Collectively they total 2.177 acres. The habitat structure is rocky shoreline. Surveys in 2009 found Heermann's gulls and glaucous-winged gulls present along with harbor seals and their pups. Black oystercatchers, glaucous-winged gulls, and harbor seals were present between 2000 and 2004.







Low Island is a small, rocky bench designated as wilderness and with a habitat structure of rocky shoreline. It is located about 200 yards off San Juan State Park on San Juan Island and is 0.825 acres in size. Surveys in 2009 found black oystercatchers and great blue herons present on the island. In 2009 harbor seals with their young were also present on the island. Between 2000 and 2004 black oystercatchers, harbor seals, and pelagic cormorants were found.

29. Pole Island





48° 36' 3" N, 123° 10' 5" W



Pole Island is a circular shaped, low-profile, wilderness island 0.721 acres in size. It is situated between San Juan and Henry Islands. Its habitat consists of sandy, gravelly shoreline, rocky shoreline, and herbaceous bald. Plant species noted on this island include wild rose, ocean spray, yarrow, gumweed, plantain, Oregon grape, and grasses. No wildlife have been observed on Pole Island during recent surveys.

30. Barren Island



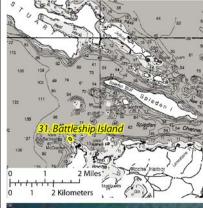




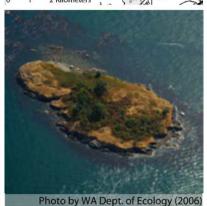
This is a low-profile, dome-shaped wilderness island located about one-half mile off San Juan Island. The habitat of this sparsely vegetated island is comprised of herbaceous bald and rocky shoreline. It is 0.721 acres in size. Wildlife present on this island in 2009 included pelagic cormorants, double-crested cormorants, and harbor seals. In surveys taken between 2000 and 2004 black oystercatchers, double-crested cormorants, harbor seals, pelagic cormorants, and pigeon guillemots were present.

31. Battleship Island

48° 37' 29" N, 123° 11' 7" W



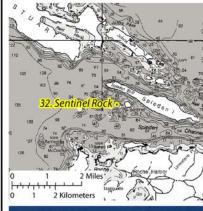




This is a circular-shaped wilderness island 2.887 acres in size with maximum elevation of 40 feet. It is located northwest of McCracken Point on the north end of Henry Island. Its habitat structure is classified as rocky shoreline with cliffs, woodland, and herbaceous bald. Trees growing on the island include Douglas fir, madrone, and willow. Understory components include ocean spray and grasses. Wildlife found on this island in 2009 included pigeon guillemot and harbor seal. Harbor seals were recorded between 2000 and 2004.

32. Sentinel Rock

48° 38' 24" N, 123° 9' 26" W







Sentinel Rock is a low-profile wilderness island with an elevation of five feet. It is about 350 yards west of Sentinel Island and is 0.329 acres in size. The habitat of this island is rocky shoreline. Lichens and mosses primarily cover the rock's surface. Wildlife present in 2009 include pelagic cormorants, also harbor seals were present with their young. From 2000 to 2004 black oystercatchers, glaucous-winged gulls, harlequin ducks, harbor seals, and pelagic cormorants were found.

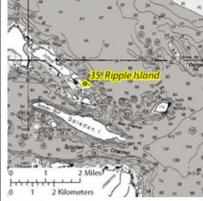
33. Center Reef 48° 38' 11" N, 123° 9' 42" W 33. Center Reef 2 Miles 2 Miles 3 Legam 3 Legam 3 Legam 48° 38' 11" N, 123° 9' 42" W Spieden Channel Buoy 3 to the left of Center Reef Photo by Khem So/USFWS (2007)

This is an extensive submerged wilderness reef, visible just beneath the surface. It is located in Spieden Channel, about 600 yards to the southwest of Sentinel Rock. It is 0.054 acres in size. It is classified as a reef habitat. Wildlife have not been observed here during survey efforts.

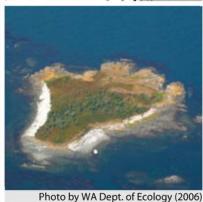


35. Ripple Island

48° 39' 25" N, 123° 7' 51" W



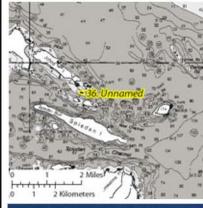




Ripple Island is a low, flat wilderness island with a maximum elevation of about 20 feet and a size of 4.151 acres. It is separated from Johns Island by a narrow, relatively shallow channel about 100 yards wide. Its habitat is made up of rocky shoreline and sandy, gravelly shoreline along with herbaceous bald and woodland. The low vegetation includes sea birch, wild rose, gumweed, and grasses. Wildlife present on the island in 2009 included surfbirds, black oystercatchers, bald eagles, and American crows. In 2009 harbor seals were present with young. From 2000 to 2004 black oystercatchers, harlequin ducks, and harbor seals were present.

36. Unnamed Reef (Shag Reef)





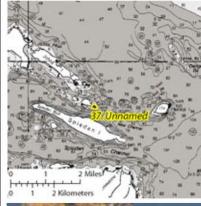




Shag Reef is essentially a flat wilderness reef with the highest point rising to about a foot above high tide. The exposed portion of the reef is divided into two parts by a deep depression that extends across the central portion. It is situated between Ripple Island and the Cactus Islands and is 0.766 acres. Wildlife present on this island in 2009 were pigeon guillemots, pelagic cormorants, glaucous-winged gulls, and black oystercatchers. Harbor seals with young were also present in 2009. Between 2000 and 2004 black oystercatchers, harlequin ducks, and harbor seals were present.

37. Unnamed Island (Little Cactus Island)





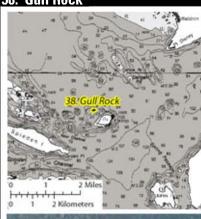




Little Cactus Island is the smallest of the Cactus Island group at 2.103 acres. It is located 50 yards to the east of the two largest islands. It is a low-profile wilderness island. Its habitat consists of rocky shoreline and herbaceous bald. In 2009 harbor seals with pups were found on this island. From 2000 to 2004 black oystercatchers, harlequin ducks, and harbor seals were found.

38. Gull Rock









Gull Rock has a flat profile with a maximum elevation of about 30 feet and a size of 1.804 acres. It is located 500 yards northwest of Flattop Island. This wilderness island is divided almost in two by differential erosion along a stratum of soft materials that is bound in each side by hard layers of conglomerate. The habitat structure is herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. Wildlife present on the island in 2009 included pigeon guillemots and glaucous-winged gulls. Harbor seals were present with pups in 2009. Between 2000 and 2004 black oystercatchers, double-crested cormorants, glaucous-winged gulls, harbor seals, pelagic cormorants, and pigeon guillemots were observed.

39. Flattop Island







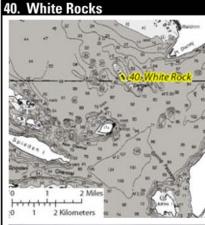


toward the southeast at a 25° angle. The variety of habitats here includes woodland, herbaceous bald, cliffs, rocky shoreline, and sandy, gravelly shoreline. Tree species include Douglas fir, madrone, shore pine, Garry oak, and willow. Wildlife present in 2009 included river otters, pigeon guillemots, and black oystercatchers. In 2009 both bald eagles and harbor seals were present with young. Between 2000 and 2004 bald eagles, black oystercatchers, harbor seals, and pigeon guille-

Flattop Island is located about one mile northeast of Green Point on Spieden Island. This 57.612 acre wilderness island appears slightly elliptical in shape, with a rocky, irregular surface. The highest point on the island is 174 feet above sea level. The entire surface of the island slopes

Photo by WA Dept. of Ecology (2006) mots were present.

48° 40' 6" N, 123° 4' 19" W



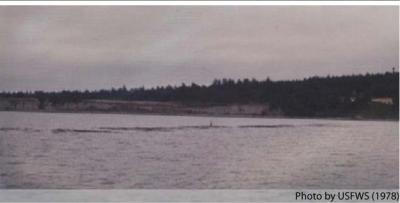




White Rocks is a wilderness area consisting of one large island and one very small islet. They are located approximately midway between Flattop Island and Point Disney on Waldron Island. Maximum elevation is 35 feet and size is 2.118 acres. The habitat is rocky shoreline and herbaceous bald. Wildlife present on the island in 2009 were pigeon guillemot and glaucous-winged gulls. Wildlife with young present in 2009 were bald eagles and harbor seals. From 2000 to 2004 black oystercatchers, double-crested cormorants, harbor seals, pelagic cormorants, and pigeon guillemots were found.

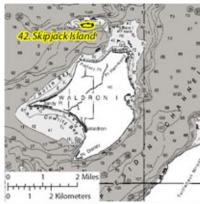
41. Mouatt Reef 48° 41' 5" N, 123° 2' 47" W



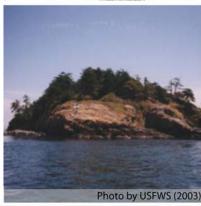


This is an extensive wilderness reef, trending northwest to southeast, which is awash at high tide. The 0.023 acre reef is located in Cowlitz Bay, on the west side of Waldron Island. Wildlife have not been observed here during survey efforts.

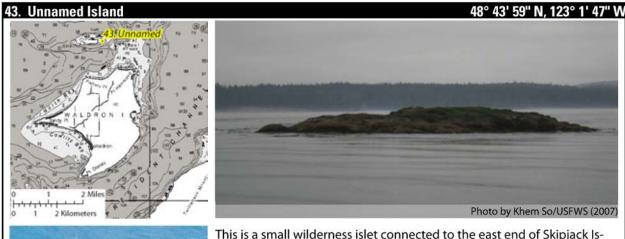
42. Skipjack Island 48° 43' 56" N, 123° 2' 9" W







Skipjack Island, with an area of 19.866 acres, is located north of Waldron Island. The north side of this wilderness island is very precipitous, with sheer cliffs extending nearly the full length of the north shoreline. The maximum elevation is about 120 feet. Skipjack Island Light, a navigational aid, is located in the northwest corner of the island. Habitats here include forest, herbaceous bald, cliffs, rocky shoreline, and sandy, gravelly shoreline. Tree species include Douglas fir, madrone, willow, Rocky Mountain juniper, and willow. Surveys found turkey vultures, pigeon guillemots, black oystercatchers, bald eagles, and American crows present on the island in 2009. Also, harbor seals with pups were present in 2009. Bald eagles, black oystercatchers, harbor seals, pigeon guillemots, and rhinoceros auklets were observed between 2000 and 2004.





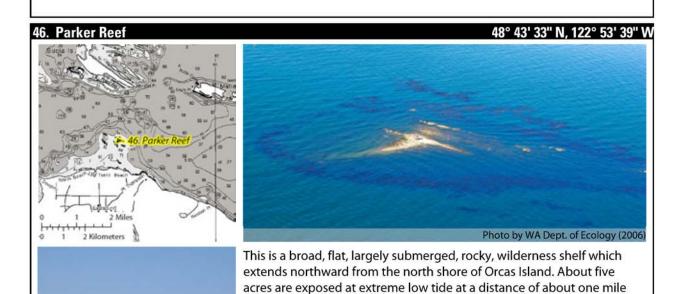
This is a small wilderness islet connected to the east end of Skipjack Island by a submerged reef. It is 0.077 acres. The habitat consists of rocky shoreline. Harbor seals with pups were present on the island in 2009. Harbor seals were present between 2000 and 2004.



Clements Reef is comprised of three small elongated reefs, which are located north of Sucia Island. This wilderness reef is completely submerged. It is listed as having a habitat structure of reef and a size of 4.747 acres, when exposed. The Clements Reef Buoy 2, a navigational aid, is located to the northwest of the reef. Wildlife noted as present in the area in 2009 included pigeon guillemots, Heermann's gulls, glaucous-winged gulls, and black oystercatchers. Harbor seals with pups were also present in 2009. Between 2000 and 2004 harbor seals were present.

45. Unnamed Island 48° 46' 11" N, 122° 52' 46" W 45. Unnamed 1 2 Miles Photo by Khem So/USFWS (2007)

The habitat structure for this wilderness island is reef and its size is 0.971 acres. It is almost always submerged or nearly submerged. The Clements Reef Danger Buoy, a navigational aid, is located to the southeast of the reef. Wildlife present here in 2009 included pigeon guillemots, Heermann's gulls, glaucous-winged gulls, and black oystercatchers. In 2009 harbor seals with pups were present. Wildlife present between 2000 and 2004 included black oystercatchers, elephant seals, harbor seals, pelagic cormorants, and pigeon guillemots.



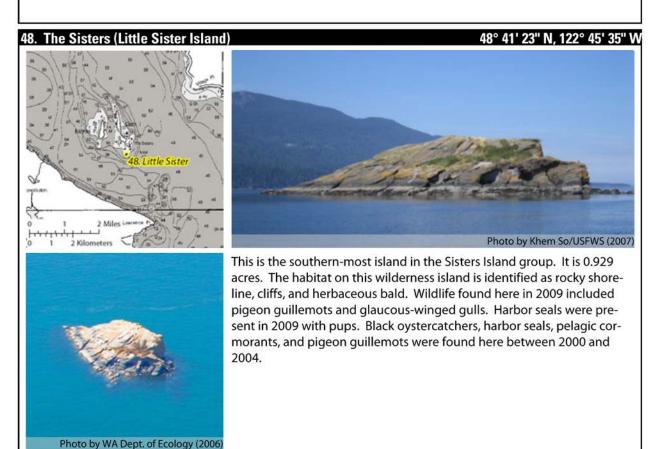
rants.

Photo by Khem So/USFWS (2007)

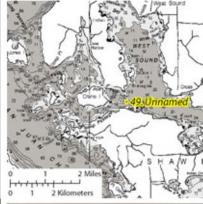
from shore. Except for a small, narrow, rocky ridge, it is completely covered at high tide. The habitat is classified as reef. The navigational aid on this island is the Parker Reef Light. In 2009 wildlife species found on the reef included scoter species, glaucous-winged gulls, and great blue herons. Harbor seals with pups were present in 2009 also. Wildlife found here from 2000 to 2004 included Brandt's cormorants, double-crested cormorants, harleguin ducks, harbor seals, and pelagic cormo-



The Sisters Islands consist of four wilderness islands or islet groups situated to the south and southeast of Clark Island. The northern three are identified collectively as The Sisters. The acreage is listed as 4.994. The southern-most island is identified separately as Little Sister and is discussed under Number 48 below. The Sisters (47) consist of two major islands, with a group of small islets and rocks in between. The largest and most northern of the group is referred to as Lone Tree Island, as it had a single conifer on it at one time. This island is about 20 feet in elevation. The second largest, or most southern of this group, has an elevation of about 15 feet. The islands have a rather low profile. The Sisters Light "17" navigational aid is located here. The habitat is rocky shoreline, herbaceous bald, and sandy, gravelly shoreline. Wildlife present on this island in 2009 were glaucous-winged gulls, turkey vultures, pigeon guillemots, and black turnstones. Wildlife with young on the island in 2009 included harbor seals and black oystercatchers. From 2000 to 2004 black oystercatchers, harbor seals, pelagic cormorants, and pigeon guillemots were located here.



49. Unnamed Island 48° 35' 43" N, 122° 58' 36" W

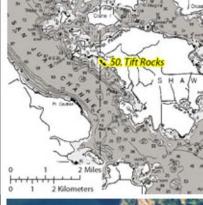






This is a 0.049 acre rocky islet located immediately east of Bell Island. The Wasp Passage Light "5" navigational aid is located here. The habitat on this wilderness island is identified as reef. During the 2009 survey, surfbirds were found present. Surveys from 2000 to 2004 did not find wildlife here.





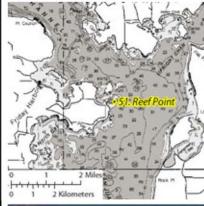




Tift Rocks is a group of five wilderness rock clusters extending only a few feet above water about 150 to 200 yards off the south shore of Shaw Island. This group is 2.465 acres. The habitat found here is herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. Tree species growing on the largest island include Douglas fir, shore pine, and Rocky Mountain juniper. Herbaceous vegetation includes wild rose, gumweed, yarrow, and grasses. Mink, harbor seals, and glaucous-winged gulls were present on the islands in 2009. Between 2000 and 2004 double-crested cormorants and harbor seals were identified here.

51. Unnamed Rock (Reef Point)

48° 31' 41" N, 122° 58' 5" W



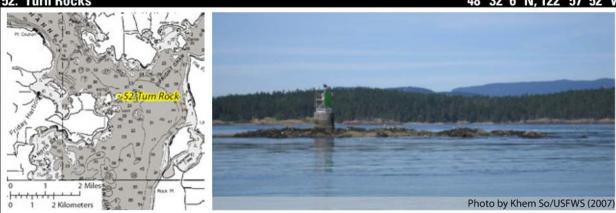




This is a barren, rocky wilderness islet which is part of a submerged extension of San Juan Island near Reef Point. It is separated from nearby shoreline by 50 to 80 yards of deep water and is 0.608 acres in size. The habitat of this rock is rocky shoreline. In 2009 Bonaparte's gulls, black oystercatchers, American crows, and Heermann's gulls were present. Also harbor seals were present with pups. From 2000 to 2004 black oystercatchers, double-crested cormorants, harlequin ducks, harbor seals, and pelagic cormorants were present.

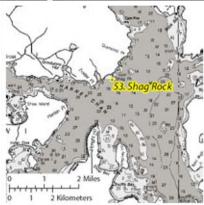
52. Turn Rocks

48° 32' 6" N, 122° 57' 52" W



This wilderness rock is located immediately east of Turn Island and is awash at high tide. It is listed at 0.197 acres. Turn Rock Light "3" is the navigational aid on this rock. The habitat is identified as reef. Heermann's gulls, harbor seals, harlequin ducks, and glaucous-winged gull chicks were present in 2009. Double-crested cormorants and harbor seals were present between 2000 and 2004.

53. Shag Rock 48° 35' 30" N, 122° 52' 31" W





Shag Rock is located about 275 yards off the south shore of Orcas Island, rising about two feet above high tide level. The navigational aid on this wilderness island is the Shag Rock Daybeacon. Size is 0.049 acres. Rocky shoreline and sandy, gravelly shoreline make up the habitat of this rock. No wildlife was found on the island in the 2005 survey. From 2000 to 2004 harbor seals were recorded here.

48° 32' 43" N, 122° 51' 15" W







Flower Island is located near the northeast corner of Lopez Island. It slopes up to a near vertical cliff on the eastern side, which reaches a maximum elevation of 74 feet. It is 3.541 acres in size. The habitats on this wilderness island are herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. Tree species observed include Douglas fir, madrone, alder, and willow. Shrubs include wild rose, snowberry, oceanspray and Himalayan blackberry. No wildlife was observed on this island during the 2009 survey. From 2000 to 2004 black oystercatchers, harbor seals, and pigeon guillemots were observed.

55. Willow Island 48° 32' 26" N, 122° 49' 21" W







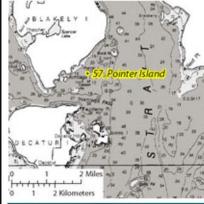
This is a dome-shaped, elongated wilderness island located near the southwest side of Blakely Island with a precipitous, rocky shoreline on all sides. It is 10.214 acres. Habitats on this island are rocky shoreline, cliffs, woodland, and herbaceous bald. Tree species found here include Douglas fir, willow, and madrone. Harbor seals with pups were observed on this island in 2009. Between 2000 and 2004 harbor seals and pigeon guillemots were found here.

56. Lawson Rock 48° 31' 51" N, 122° 47' 20" W

Lawson Rock, located at the east entrance of Thatcher Pass between Blakeley and Decatur Islands, is exposed only at low tide and is 0.005 acres in size. This wilderness rock is marked by Lawson Rock Light 2 navigational aid. The habitat is reef. Recent wildlife surveys have not found wildlife present here.

Photo by Khem So/USFWS (2007)

57. Pointer Island 48° 32' 18" N, 122° 46' 56" W







This is a low, flat-topped wilderness islet situated about 600 yards from the southeast corner of Blakely Island. It extends about 16 feet above high tide and is 0.591 acres. It consists of a rocky shoreline habitat. In 2009 swallow species, pigeon guillemots, and black oystercatchers were found on the island. Glaucous-winged gulls and harbor seals both with young were also present in 2009. Black oystercatchers, double-crested cormorants, glaucous-winged gulls, harbor seals, pelagic cormorants, and pigeon guillemots were present between 2000 and 2004.



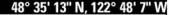






This is a low-profile wilderness island, rising about 20 feet above high tide, located about one-half mile east of Blakely Island, and 0.061 acres in size. Black Rock Light "9" navigational aid is located here. Its habitat is identified as rocky shoreline. In 2009 harbor seals were present. Between 2000 and 2004 double-crested cormorants and harbor seals were present.

59. 3 Unnamed Rocks (Spindle Rock)









This is a group of three rocky wilderness islets off the northwest shore of Blakely Island. The farthest islet out is about 400 yards from shore and is known as Spindle Rock. It rises about 20 feet above high tide. The other two rocks are 30 to 40 yards from shore and rise only a few feet above high tide. Collectively they are 0.653 acres. The navigational aid found on the northernmost islet is Peavine Pass Rocks Daybeacon. The habitat of these islets is rocky shoreline. In 2009 raccoons, surfbirds, glaucouswinged gulls, black oystercatchers, and American crows were present on the islets. Harbors seals with pups were present in 2009 also. Harbor seals and pigeon guillemots were found here from 2000 to 2004.

60. Brown Rock

48° 36' 16" N, 122° 48' 41" W

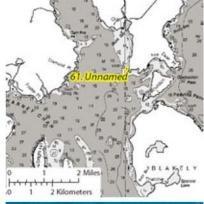






This is a single wilderness rock about 200 yards off the south shore of Orcas Island. It is surrounded by deep water and is 0.199 acres. Habitat found here is rocky shoreline. In 2009 black oystercatchers were present on this rock. Black oystercatchers were also present from 2000 to 2004.

61. Unnamed Rock 48° 36' 8" N, 122° 49' 56" W

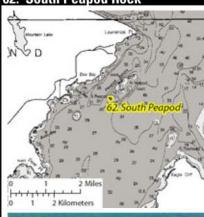






This is a bare wilderness islet, surrounded by deep water, located 200 to 300 yards off the south shore of Orcas Island. It is 0.076 acres in size. The habitat of this rock is rocky shoreline. Glaucous-winged gulls were found on this island in 2009. Other recent surveys did not find wildlife here.

62. South Peapod Rock







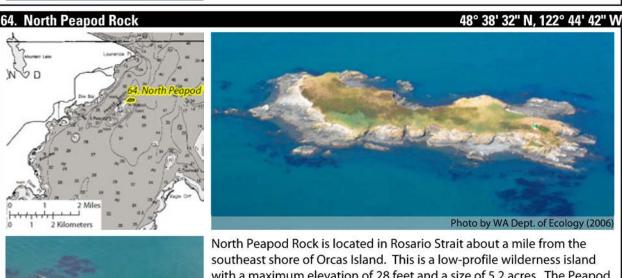


South Peapod Rock is located about a mile to the southwest of North Peapod Rock in Rosario Strait. This is a low profile wilderness island 2.014 acres in size. Habitats found on here include cliffs, herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. In 2009 pigeon guillemots, pelagic cormorants, Heermann's gulls, harlequin ducks, and black oystercatchers were present on the island. Harbor seals and glaucous-winged gulls were present with young in 2009. Between 2000 and 2004 black oystercatchers, glaucous-winged gulls, harlequin ducks, harbor seals, pelagic cormorants, and pigeon guillemots were identified here.





Peapod Rocks are a grouping of three wilderness islets situated between North and South Peapod Rocks in Rosario Strait. They are 1.130 acres in size. The habitat of these rocks is rocky shoreline. Black turnstones, black oystercatchers, belted kingfishers, and bald eagles were present on these rocks in 2009. Also harbor seals with pups were present in 2009. From 2000 to 2004 black oystercatchers, harlequin ducks, and harbor seals were observed.

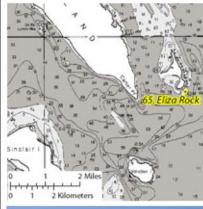




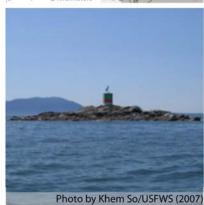
southeast shore of Orcas Island. This is a low-profile wilderness island with a maximum elevation of 28 feet and a size of 5.2 acres. The Peapod Rocks Light "15" navigational aid is found on the eastern end of this island. The habitats found here include herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. In 2009 pigeon guillemots, glaucouswinged gulls, and bald eagles were present. Harbor seals with pups were also present in 2009. Between 2000 and 2004 black oystercatchers, harbor seals, harlequin ducks, and pigeon guillemots were located here.

65. Eliza Rock

48° 38' 37" N, 122° 34' 42" W



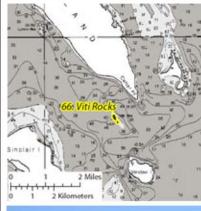




Eliza Rock is a circular, flat wilderness rock located about 100 to 150 yards off the south end of Eliza Island. It is 0.343 acres. The navigational aid on this rock is the Eliza Rocks Junction Light. The habitat here is rocky shoreline. Wildlife found during the 2009 survey included pigeon guillemots. Both harbor seals and black oystercatchers were present with young in 2009. Black oystercatchers, harbor seals, pelagic cormorants, pigeon guillemots, and Steller sea lions were present.

66. Viti Rocks

48° 37' 60" N, 122° 37' 22" W

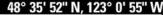






This group, located about .75 miles southwest of Carter Point on Lummi Island, consists of one large wilderness island and a small wilderness islet to the southeast. It is 2.72 acres. The larger island rises to an elevation of 35 feet. The smaller islet is the exposed portion of a reef which extends only a few feet above water at high tide. The Viti Rocks Light is located here. The habitats are identified as rocky shoreline, cliffs, and herbaceous bald. Pigeon guillemots were present in 2009. Birds with nests in 2009 included pelagic cormorants, glaucous-winged gulls, and double-crested cormorants. Also, harbor seals were present with pups in 2009. Between 2000 and 2004 black oystercatchers, double-crested cormorants, glaucous-winged gulls, harlequin ducks, harbor seals, pelagic cormorants, and pigeon guillemots were identified here.

68. Unnamed Rock (Bird Rocks)





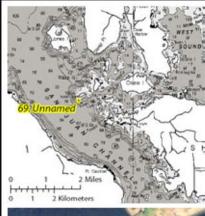




This 0.111 acre wilderness rock located midway between Crane and McConnell Islands is awash at high tide. This is the location of Bird Rocks Light, a navigational aid. The habitat is classified as rocky shoreline. Harbor seals with pups were present in 2009. From 2000 to 2004 harbor seals were also present.

69. Unnamed Island

48° 35' 25" N, 123° 2' 3" W







This consists of a group of bare wilderness rocks which are exposed portions of a submerged reef that extends out from Yellow Island, they are awash at high tide. They are 0.203 acres. The habitat is identified as rocky shoreline. The 2009 survey found glaucous-winged gulls and harbor seals with pups present here. Surveys between 2000 and 2004 found double-crested cormorants and harbor seals present here.

70. Low Island 48° 35' 21" N, 123° 1' 33" W

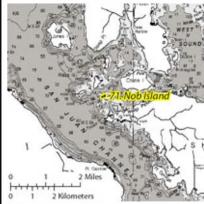






Low Island is a low-profile wilderness island located about one-third mile south of McConnell Island and 1.391 acres in size. Habitats found here include herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. Black oystercatchers, bald eagles, and American crows along with harbor seals with pups were present here in 2009. Black oystercatchers, harbor seals, and pigeon guillemots were recorded between 2000 and 2009.

71. Nob Island 48° 35' 27" N, 123° 1' 6" W







Located near the west side of Cliff Island in the Wasp Passage, Nob Island is a round, cone-shaped wilderness island rising to an elevation of 20 feet with a group of small rocks and islets located immediately to the southwest. The combined acreage is 1.393 acres. The habitat consists of herbaceous bald, rocky shoreline, and sandy gravelly shoreline. Tree species include Rocky Mountain juniper, Douglas fir, madrone, and immature Garry oaks. In 2009 harbor seals with pups were present. Between 2000 and 2004 black oystercatchers and harbor seals were found.

72. Unnamed Island Sound 2 Miles 1 2 Kilometers



48° 35' 12" N, 123° 0' 28" W



This is a small, circular wilderness island located off Shaw Island, from which it is separated by deep water. It is 0.210 acres. The habitat structure is rocky shoreline and herbaceous bald. Vegetation observed here includes Rocky Mountain juniper and grasses. Wildlife present on this island in 2009 included harbor seals with pups. Other recent surveys did not record wildlife.

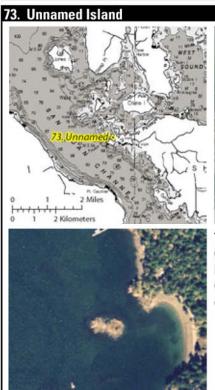


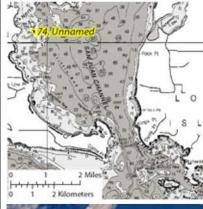
Photo by WA Dept. of Natural Resource



This is a small wilderness islet located 150 yards off Shaw Island and 0.303 acres in size. Its habitat consists of herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. Tree species noted here include Garry oak and Rocky Mountain juniper. No recent surveys have recorded the presence of wildlife.

74. Unnamed Rocks

48° 30' 17" N, 123° 0' 30" W



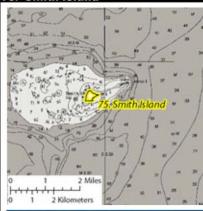




This is a group of wilderness islets located in Griffin Bay off of the east shore of San Juan Island. The rocks are just south of Dinner Island and total 0.615 acres in size. Its habitat is rocky shoreline. In 2009 pigeon guillemots and harbor seals with pups were present. Between 2000 and 2004 black oystercatchers, double-crested cormorants, harlequin ducks, and harbor seals were observed here.

Smith Island

48° 19' 9" N, 122° 50' 32" W







Smith Island is a 37.883 acre non-wilderness island located midway between the Admiralty Inlet and Lopez Island. Its habitat consists of bluffs, wetlands, grasslands, herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. The Smith Island Light is located here. In the 2009 survey, a wide variety of wildlife was found on Smith Island including white-winged scoters, tufted puffins, swallows, surf scoters, rhinoceros auklets, pigeon guillemots, unidentified small shore birds, pelagic cormorants, marbled godwits, Heermann's gulls, harlequin ducks, double-crested cormorants, black turnstones, black oystercatchers, and American crows. Wildlife with young present in 2009 included harbor seals, glaucouswinged gulls, and bald eagles. Bald eagles have been identified here from 2000 to the most recent survey in 2009.

76. Minor Island

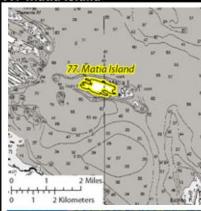




Minor Island is a 2.483 acre non-wilderness island located in the eastern Strait of Juan de Fuca, midway between Admiralty Inlet and Lopez Island. The island is connected to Smith Island, which lies to the southwest, by a low sandy/gravelly spit. The Minor Island Light navigational aid is located here. Its habitat is classified as coastal spit, rocky shoreline, and sandy, gravelly shoreline. In 2009 wildlife found here included scoters, rhinoceros auklets, pigeon guillemots, Heermann's gulls, doublecrested cormorants, black oystercatchers, and black-bellied plovers. An immature bald eagle was also present in 2009 along with glaucouswinged gulls with chicks and harbor seals with pups. Between 2000 and 2004 bald eagles were noted here.





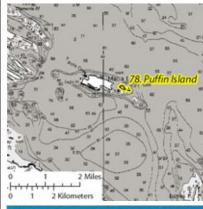




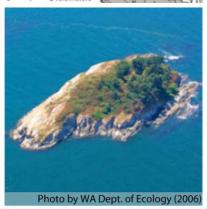
Matia Island is a 158.965 acre wilderness island located in the Gulf of Georgia, north of Orcas Island, and east of Sucia Island. Its habitat includes old-growth dry-mesic Douglas-fir-Western Hemlock forest, dry Douglas-fir-(Madrone) forest and woodland, cliffs, freshwater emergent wetland, herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. In 2009 cormorants, swallows, pigeon guillemots, glaucous-winged gulls, Canada geese, black oystercatchers, and bald eagles were present. Also present in 2009 were harbor seals with pups. Between 2000 and 2004 bald eagles, black oystercatchers, harlequin ducks, harbor seals, pelagic cormorants, and pigeon guillemots were observed.

78. Puffin Island

48° 44' 41" N, 122° 49' 16" W



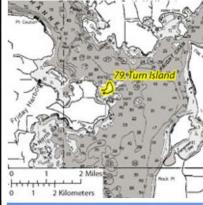




Puffin Island is a wilderness island located to the east of Matia Island and 7.346 acres in size. The Puffin Island Shoal Light "19" navigational aid is located here. Its habitat consists of rocky shoreline, cliffs, herbaceous bald, and woodlands. Vegetation noted here includes Douglas fir, willow, wild rose, oceanspray, snowberry, Himalayan blackberry, and grasses. The 2009 survey found harlequin ducks, glaucous-winged gulls, and black oystercatchers. Also harbor seals with pups and an immature bald eagle were present in 2009. Bald eagles, black oystercatchers, harlequin ducks, harbor seals, pelagic cormorants, and pigeon guillemots were present between 2000 and 2004.







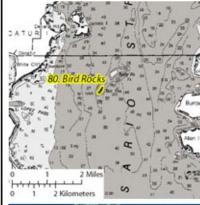




Turn Island is a 32.96 acre non-wilderness island located 300 yards east of San Juan Island. The island is underlain with consolidated rock excepting the southwestern extremity, where the shoreline is fringed with glacial drift. The habitat of this island includes dry Douglas-fir-(Madrone) forest and woodland, herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. Tree species observed here include Douglas fir, madrone, shore pine, Rocky Mountain juniper, and Garry oak. In 2009 glaucous-winged gulls, great blue herons, and American crows were present on the island. Between 2000 and 2004 bald eagles, rhinoceros auklets, and raccoons were noted here.

80. Four Bird Rocks

48° 29' 8" N, 122° 45' 42" W



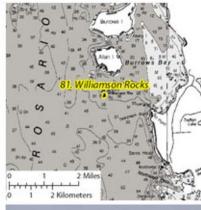




Four Bird Rocks is a wilderness group located in the Rosario Strait, east of Decatur Island. They total 3.328 acres. The navigational aid Belle Rock Sector Light is located northeast of, but not on, the refuge islands. The habitat of this group is identified as rocky shoreline. Wildlife present in 2009 included pigeon guillemots, pelagic cormorants, Heermann's gulls, double-crested cormorants, and black oystercatchers. Wildlife present with nests and young in 2009 included glaucous-winged gulls. Brant's cormorants were present with nests. Harbor seals were also present with young. From 2000 to 2004 black oystercatchers, Brandt's cormorants, double-crested cormorants, glaucous-winged gulls, harlequin ducks, harbor seals, pelagic cormorants, and pigeon guillemots were observed.

81. Three Williamson Rocks

48° 26' 59" N, 122° 42' 21" W







Williamson Rocks are a wilderness group located south of Allan Island that total 1.55 acres in size. The Williamson Rocks Lighted Gong Buoy "4" navigational aid is south of, but not on, the refuge islands. The habitat here is rocky shoreline. Wildlife present in 2009 included surf birds, pigeon guillemots, Heermann's gulls, harbor seals, double-crested cormorants, Brant's cormorants, and black oystercatchers. Pelagic cormorants and glaucous-winged gulls were both present with young and nests in 2009. Between 2000 and 2004 black oystercatchers, double-crested cormorants, glaucous-winged gulls, harbor seals, pelagic cormorants, and pigeon guillemots were present.

82. Colville Island









Colville Island is a wilderness island located south of Lopez Island. It is 11.632 acres. The habitat of this island is rocky shoreline and herbaceous bald. Wildlife present here in 2009 included turkey vultures, pigeon guillemots, glaucous-winged gulls, and black oystercatchers, along with harbor seals and their pups. Black oystercatchers, double-crested cormorants, harbor seals, and pigeon guillemots were found between 2000 and 2004.

83. Buck Island

48° 27' 8" N, 122° 55' 17" W







Buck Island is a wilderness island located south of Lopez Island. It is 1.302 acres. Its habitat consists of rocky shoreline and herbaceous bald. Wildlife found on this island in 2009 included pigeon guillemots and harlequin ducks. Black oystercatchers, double-crested cormorants, harbor seals, and pigeon guillemots were observed between 2000 and 2004.

84. Bare Island 84. Bare Island 2 Miles 0 1 2 Kilometers





Bare Island is a wilderness island located north of Waldron Island and is 2.091 acres. Habitat here includes herbaceous bald, rocky shoreline, and sandy, gravelly shoreline. In 2009 pigeon guillemots, pelagic cormorants, Heermann's gulls, great blue herons, double-crested cormorants, black turnstones, black oystercatchers, and bald eagles were present on the island. Harbor seals and glaucous-winged gulls were present with young in 2009. Between 2000 and 2004 black oystercatchers, double-crested cormorants, harbor seals, pelagic cormorants, and pigeon guillemots were present.