



2007-2008 Guide to American and English Camps

Park founded to celebrate peace, nature

Created by an act of Congress in 1966, San Juan Island National Historical Park commemorates the peaceful resolution of the Northwest Boundary dispute between Great Britain and the United States. The boundary dispute is perhaps the best-known period in island history. American Camp and English Camp are administered to preserve and protect historic buildings and archaeological remnants, and interpret the "Pig War" crisis and joint military occupation of San Juan Island by the United States and Great Britain from 1859 to 1872. (See page 2.)



English Camp's barracks, blockhouse and formal garden sit at the edge of the embankment on Garrison Bay.

Things to see and do

Hiking & picnicking

American and English camps abound with opportunities for strenuous hiking, taking a leisurely stroll through a field of wildflowers or finding a log and enjoying the seashore. Find the perfect spot.

(See pages 6 & 7.)

Special programs

San Juan Island National Historical Park offers a full range of special programs, most of which are scheduled during the summer season. Visit our website to view the 2006 Summer Program Guide.

(See pages 5 & 8.)

Wildlife

There's plenty to see here—orcas, seals, fox, deer, more than 200 species of birds, 32 species of butterflies and the occasional harmless garter snake sunning on the trail. Don't miss the active eagles' nest at the American Camp visitor center.

(See pages 11 & 12.)

Be a Junior Ranger

Ask a park ranger or volunteer at the American Camp or English Camp visitor centers about how you can earn a Junior Ranger badge. It's easy and fun!



Public transportation to English and American camps

Island Bicycles: 378-4941
Bicycles

Susie's Mopeds: 378-5244 or (800) 532-0087
Mopeds and automobiles

M&W Rental Cars: 378-2794 or (800) 323-6037
Automobile rentals and sales

San Juan Taxi: 378-3550 or 378-TAXI

Island Tours/Taxi: 378-4453

Bob's Taxi & Tours: 378-6777 or (877) 4-TAXIBOB
Service to all points on request.

San Juan Transit & Tours: 378-8887 or (800) 887-8387
Regularly scheduled routes north to English Camp during the summer season with a reservation-only schedule available to American Camp three times daily. Guided tours available.



National Park Service
U.S. Department of the Interior

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The park is administered by the National Park Service, U.S. Department of the Interior. For information, write: Superintendent, P.O. Box 429, Friday Harbor, WA 98250; or call (360) 378-2902.

Web site: www.nps.gov/sajh.
FAX (360) 378-2996.

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Basic information

Finding your way to the parks

American Camp

The **American Camp** visitor center is about six miles southeast of Friday Harbor along Cattle Point Road. Simply drive west on Spring Street to Mullis Street and turn left. The road will wind a bit and change its name twice until it becomes Cattle Point Road. Remember to turn right on the visitor center entrance road *after* you see the large park entrance sign. If you turn before the sign, you'll be in the Eagle Cove housing development. Cattle Point Road passes three miles through the park right-of-way and the speed limit is 45 mph. Please be mindful, especially in the wooded stretch, that wild animals cross this road and bicyclists may be around one of the blind corners. Startled cyclists tend to turn and look over their left shoulders, which causes them to swerve toward the center line. Park speed limits are 15 mph on the visitor center entrance road and 25 mph on Pickett's Lane (which leads to South Beach). Remember to be especially careful when exiting the American Camp visitor center entrance road.

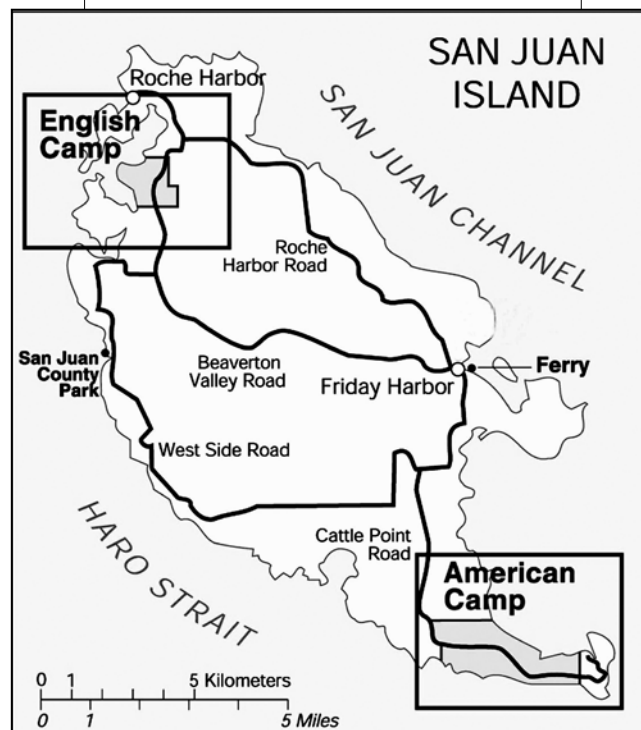
Several accidents have happened at this intersection.

English Camp

English Camp is located about nine miles northwest of Friday Harbor on West Valley Road. Take Spring Street

to Second Street and turn right. Go straight. At the first stop sign you encounter, Second becomes Guard. Go to the next stop sign and continue to go straight. The street runs past the library, bends right and left and becomes Beaverton Valley Road. Follow Beaverton Valley Road over Cady Mountain (it's a small mountain). The

seriously. English Camp also may be accessed via Roche Harbor Road. To reach the Roche Harbor Road from Friday Harbor, turn right at the second stop sign onto Tucker Avenue. Tucker becomes Roche Harbor Road just outside of town. Take Roche Harbor Road to West Valley Road and turn left. The parade ground entrance road will be your second right after you pass the park entrance sign. Take care to safely mind the 15 mph speed limit.



road becomes West Valley Road. About 500 feet past the park entrance sign, on the left, is the entrance road to the parade ground.

The speed limit on this gravel track is 15 mph, and we urge you to take it

cyclists should remember that, while they *do* have the right-of-way on county roads, it is considered a courtesy here to form a single line right. If children are along, adults should ride at the rear of the pack.

A Word About Road Safety

The island is only 54 square miles (about 16 1/2 miles long and 6 1/2 miles wide at the midsection). That means not only is it hard to get lost, you don't have to be in an all-fired hurry to get anywhere!

If you're driving an automobile or truck, be especially mindful of bicycles, mopeds and three-wheeled motorized scooters. They have the right-of-way the same as you. If you must pass, do it carefully and do not cross a solid double line. Conversely,

Things to know

Picnic areas are available at both camps.

Off-road travel (by vehicles, mopeds or bicycles) is not allowed in the park.

Pets must be kept on leash and picked up after within park boundaries.

Natural features and ruins must be left undisturbed.

ONLY fruits, nuts, unoccupied seashells and mushrooms may be collected for personal use.

Archaeological artifacts are protected under federal law. Collecting, digging or using metal detectors is prohibited.

Using or possessing fireworks is prohibited year-round.

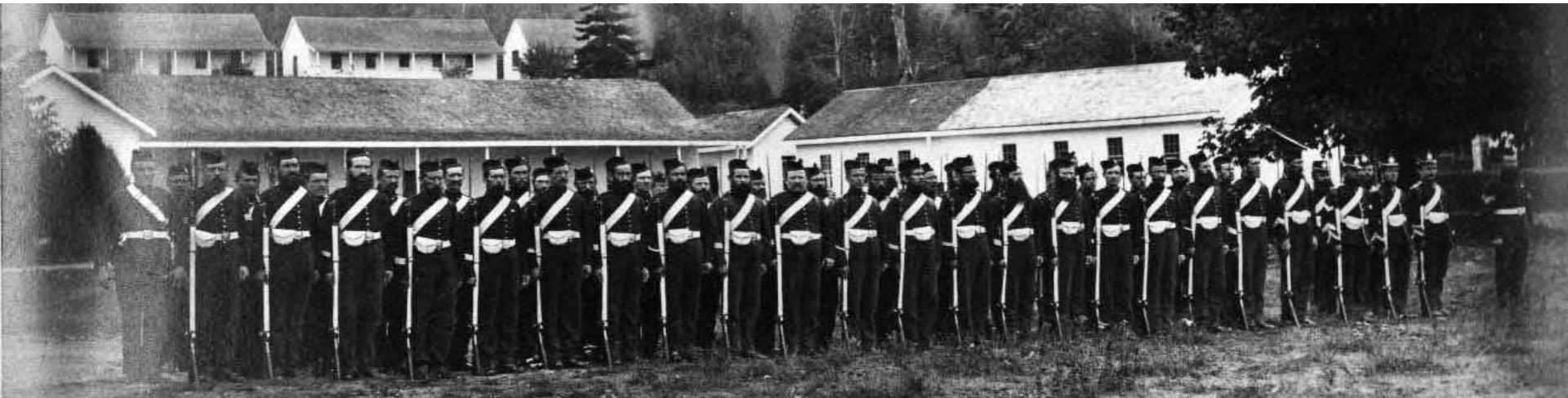
Hunting, trapping or carrying firearms on park lands is prohibited.

Horseback riding is allowed by permit in designated areas only.

The park is a day-use only area, open from dawn to 11 p.m. No campgrounds are available at either camp. The names harken to the 19th century military posts. Several private facilities and a county-owned campground are available on the island.

**www.nps.gov/sajh
FAX (360) 378-2996**

The Pig War: Close call for the United States and Great Britain



The British Royal Marine Light Infantry company comes to attention on the parade ground in their camp on Garrison Bay in the late 1860s.

On July 27, 1859, George E. Pickett's Company D, 9th Infantry arrived on San Juan Island with a mission to protect United States citizens from the British government on Vancouver Island. The reason? An American settler named Lyman Cutlar had shot a pig belonging to the Hudson's Bay Company. Everyone overreacted, particularly U.S. Department of Oregon commander Brigadier General William S. Harney, who had issued Pickett his orders.

But more was involved than just a dead pig. For nearly 50 years, the two nations had been contending over the international boundary in the Oregon Country, a vast expanse of land consisting of the present states of Washington, Oregon and Idaho, portions of Montana and Wyoming and the province of British Columbia. The Oregon Treaty of 1846 had given the United States undisputed possession of the Pacific Northwest south of the 49th parallel, extending the boundary to the "middle of the channel which separates the continent from Vancouver's Island; and thence southerly through the middle of said channel and of Fuca's straits to the Pacific Ocean." But while the treaty settled the larger boundary question, it created additional problems because its wording left unclear who owned the San Juan Islands.

The difficulty arose over treaty language that referred to the boundary as the "middle of the channel." There were actually two channels—Haro Strait nearest Vancouver Island, and Rosario Strait nearer the mainland. The San Juan Islands lie between the two. Britain insisted on the Rosario Strait; the U.S., Haro Strait. Thus, both sides claimed the archipelago.

To solidify the British claim, the Hudson's Bay Company occupied the southern end of San Juan, first with a salmon-salting station in 1850, followed by a sheep ranch—Belle Vue Farm—three years later. The Americans, meanwhile, declared the island within the limits of first Oregon (1848) then Washington Territory (1853). By 1859 about 18 Americans, including Cutlar, had settled on San Juan Island in anticipation of official American possession. Neither group acknowledged the jurisdiction or taxing authority of the other. Tempers were growing short.

Then Cutlar shot the pig. The Hudson's Bay Company allegedly threatened the American with arrest by British authorities if he did not make fair restitution for the pig. This compelled Harney to dispatch Pickett to San Juan Island.

British Columbia Governor James Douglas responded by sending three warships with 61 total guns under Royal Navy Captain Geoffrey Phipps Hornby to dislodge Pickett. The two sides faced off on the Cattle Point peninsula for more than three months until the arrival of U.S. Army commander Winfield Scott, who was

dispatched by the President James Buchanan. Scott and Douglas negotiated a joint occupation of the island until the dispute could be resolved through diplomatic channels. The Americans remained at Cattle Point while Royal Marines established in March 1860 a comfortable camp on Garrison Bay, 13 miles north.

The joint occupation ended 12 years later when, on October 21, 1872, Kaiser Wilhelm I of Germany, acting as arbitrator, settled the dispute by awarding the San Juan Islands to the United States. Thus ended the so-called Pig War—with the pig the only casualty.

Wildlife to watch for: Bluebirds and harbor seals

Yes, that flicker of blue in the sky may be a bluebird. Sixteen Western bluebirds are now winging their way over the San Juan Islands for the first time in nearly 50 years, thanks to the efforts of the San Juan Islands Audubon Society, San Juan Preservation Trust, American Bird Conservancy and other groups.

These harbingers of spring were one of the more common songbirds at the turn of the century, and early settlers often referred to them as “blue robins” after their own robins in Europe. The loss of this native has been attributed to a lack of nesting sites, and the San Juan Islands Western Bluebird Reintroduction Project is modeled after nest box programs that have successfully restored bluebird populations across the country.

Over the next five years, 90 birds will be released mostly in the San Juan Valley—due to its ideal bluebird habitat—and eventually to Lopez Island. More than 150 volunteers from the San Juan Islands

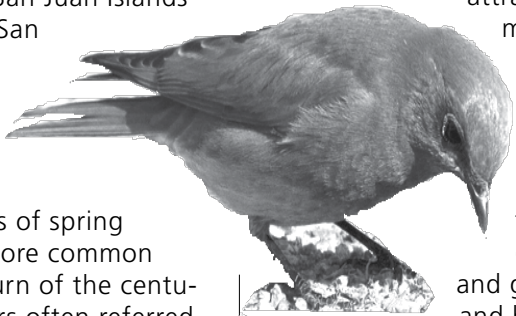
built 130 nest boxes and are hosting boxes on their property and tracking the bluebirds.

Keep an eye out for these newcomers. The male’s rusty red breast and vivid blue head, wings and tail

attracts the females, which are much more demure with pale blue wings and tail, sooty gray back and grayish throat and belly. Don’t

confuse Western bluebirds with other local “blue” birds: tree, violet-green or barn swallows, red-breasted nuthatches, or the rare mountain bluebirds.

Habitat includes open woodlands, agricultural fields and prairies. If you see a nesting box, watch how these birds hunt. In a technique known as ground-sallying, they fly out, snatch insects from the ground and return to their perch. Also check lower bushes, nearby trees and listen for soft “pew” or “chuck” calls.



If you spot a bluebird, don’t approach the box or birds, but enjoy them at a distance. And please report your sighting to a park ranger or volunteer at the American or English Camp visitor centers.

Steer clear of harbor seal pups

Everyone loves these doe-eyed harbor seals, the most common marine mammals in the San Juan Islands. They’re the ones that pop their round heads out of the water for a look around, or perch in crescent moon shapes on offshore rocks and beaches. Even cuter are the pups, which you may see from late June through August.

Occasionally you may see a lone pup on a beach. If you do, please do not approach, touch or try to coax the pup back into the water. Often the mother

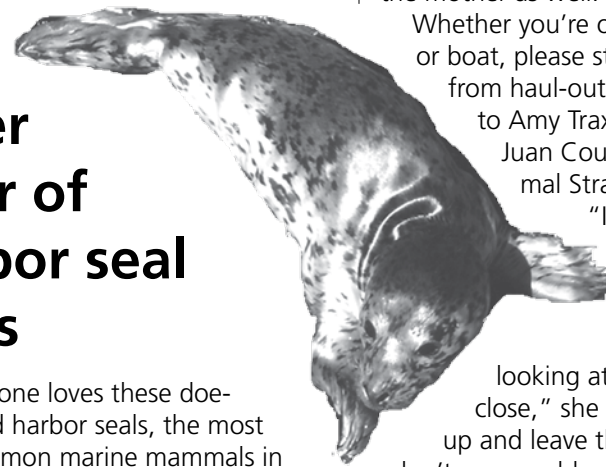
will stash the pup on the beach for 24 hours while foraging, and will return. If a well-meaning visitor is curious and approaches the pup thinking it’s in danger, the pup may get stressed and dehydrated. And it may frighten off the mother as well.

Whether you’re onshore, in a kayak or boat, please stay 100 yards away from haul-out sites. According to Amy Traxler of the San Juan County Marine Mammal Stranding Network,

“If even one seal acknowledges your presence by picking up its head and

looking at you, you’re too close,” she said. “Slowly back up and leave the area. If you don’t, you could cause a stampede that may separate little pups from their moms.”

If you see a pup, please contact the visitor center immediately. The San Juan County Marine Mammal Stranding Network will be called to assess the situation, and if the pup has been abandoned, they will contact the Wolf Hollow Wildlife Rehabilitation Center.



2007 Summer Program schedule: Something for everyone

Weekly Programs

Pig War Story Guided Walk—Park rangers and volunteers describe events leading up to and including the Pig War and the peaceful joint occupation of San Juan Island by British and American troops. **Walks are scheduled at American Camp 11:30 a.m., Saturdays, June 2 to September 1.**

Living History: Life During the Joint Military Occupation on San Juan Island—Park rangers and volunteers create military and civilian life during the island's early pioneer period. Activities include blacksmithing, coopering, weaving, needlework and exhibitions of military equipment and skills. **12:30 to 3:30 p.m., Saturdays, June 2 to August 25, English Camp parade ground.**

Wildlife in the San Juan Islands
Puzzled by an animal or bird? Wolf Hollow Wildlife Rehabilitation Center Education Coordinator Shona Aitken answers questions and uses a variety of media to talk about wildlife in the San Juan Islands. **1 to 3 p.m., Fridays, June 8 to August 31, English Camp**

Special Programs

Ancient Visitors: Tracing the Pre-history of San Juan Island Through Archaeology—University of Washington archaeologist, Dr. Julie Stein, traces ancient habitation of San Juan Island in this guided walk on the American Camp prairie. **10 a.m., Saturday, June 2, South Beach main parking area at American Camp.**

The Birds of American Camp Come join San Juan Island bird expert and former national park ranger Barbara Jensen for a colorful 90-minute walk through American Camp's prairies. The program is suitable for beginning as well as veteran birders and provides insights into the park's rich flora and fauna. **7:30 a.m., Sunday, June 3, American Camp visitor center.**

Intertidal Walk at Grandma's Cove—Learn about plant and animal life, from algae to invertebrate animals, during this tide pool walk with biologists Mike Kaill and Bob



Anita Barreca and Roger Ellison assist a young visitor in weaving a garden trellis.

Lemon. Bring rubber boots and an old towel for use as a knee pad and hand wiper. **9 a.m., Sunday, June 3, American Camp visitor center parking area.**

Mountain in the Clouds: Saving the Wild Salmon of the Olympic Peninsula—Author Bruce Brown re-visits his classic 1980s book about threatened wild salmon in light of the proposed removal of dams on the

Elwha River in Olympic National Park. **2 p.m., Saturday, June 9, English Camp barracks.**

Otter Pelts and Silk: The Quest for Empire in the Pacific Northwest—Learn about San Juan Island's direct connection to the China trade and the struggle for empire among the Spanish, British and United States fur trading companies and governments in this 90-minute program with

historian Mike Vouri. **2 p.m., Saturday, June 16, English Camp barracks.**

A Weaving Legacy—Join Cowlitz Nation weaver Judy Bridges and Fort Nisqually interpreter and storyteller Karen Haas for a fun afternoon of weaving with all-natural fibers, including wild reeds. Bridges is a direct descendent of Hudson's Bay Company pioneers. **All day, Saturday, June 23, English Camp parade ground.**

In Concert: Sugar on the Floor
Folk singer Michael Cohen and the group "Sugar on the Floor" present a variety of songs from the 19th century and other genres. **7 p.m., Saturday, June 23, English Camp barracks.**

Pickett's Irish: The Irish in the U.S. Army in the 1850s—Historian Mike Vouri and folk musician Michael Cohen present this new program that takes a closer look at the Irish in the U.S. Army in words and song. **2 p.m., Saturday, June 30, English Camp barracks.**

Life and Times of General George Pickett—Park Ranger Mike Vouri and folk musician Michael Cohen join with the San Juan Community

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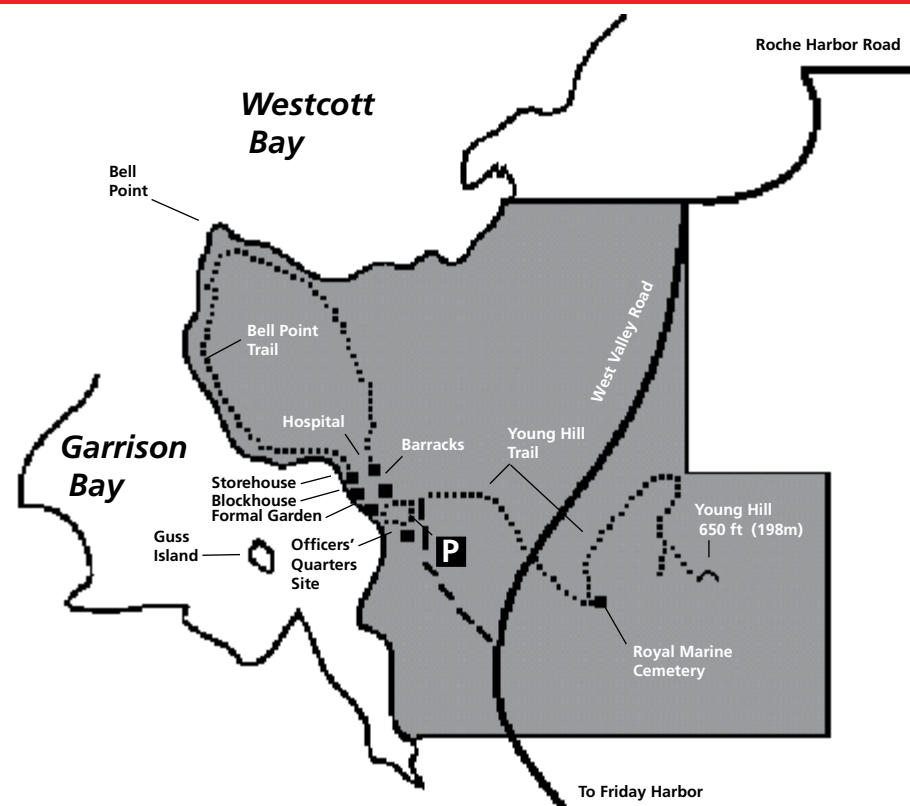
Young Hill trail—Hike this fairly steep trail up 650 feet to the top of Young Hill for a panoramic view of the island's northwest corner. Novice walkers should take care to pace themselves as most of the gain is in the last half mile. An exhibit panel identifying geographic features is mounted on an overlook about two-thirds of the way up the hill. (1.25 mi.)

Royal Marine cemetery—The Royal Marine cemetery is about 50 yards off the Young Hill trail, about a third of the way up. Five Royal Marines are interred, while a memorial stone is in place for two other marines. A stone also commemorates a civilian who was accidentally shot by his brother while hunting.

Bell Point trail—Walk the mile-long, fairly level trail to Bell Point for a view of Westcott Bay. If you like to harvest shellfish, check with the park ranger at the visitor center for locations, daily limits and red tide warnings. (2-mi. loop)

Self-guided walk—Relive the Royal Marine era along the trail that starts at the base of the main entrance trail. Pick up guides in the box next to the bulletin board and follow the numbered posts. Please return when finished to the box provided at the end of the walk. If you wish to purchase a guide, they are available for a one dollar donation at the visitor center. (.25 mi.)

English formal garden—The garden lies between the officers' quarters sites and the parade ground. The camp's second commanding officer had it built for his family to remind them of home.



Visitor center resources

Both American Camp and English Camp (summer only) have visitor centers with maps, books and gifts. The bookstore at American Camp is more comprehensive. Here are some of the more popular guides and book titles.

Booklets for guided walking tours of American Camp, English Camp and Jakle's Lagoon.

The Pig War: Standoff at Griffin Bay, by Mike Vouri.

Outpost of Empire: The Royal Marines and the Joint Occupation of San Juan Island, by Mike Vouri.

Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia & Alaska, by Jim Pojar and Andy MacKinnon.

Wild Plants of the San Juan Islands, by Scott Atkinson & Fred Sharpe.

The Butterflies of Cascadia: A Field Guide to All the Species of Washington, Oregon and Surrounding Territories, by Robert Michael Pyle.

Seashore Life of the Northern Pacific Coast, An Illustrated Guide to Northern California, Oregon, Washington and British Columbia, by Eugene N. Kozloff.

Birds of the Puget Sound Region, by Morse, Averza and Opperman.

Birding in the San Juan Islands, by Mark G. Lewis and Fred A. Sharpe.

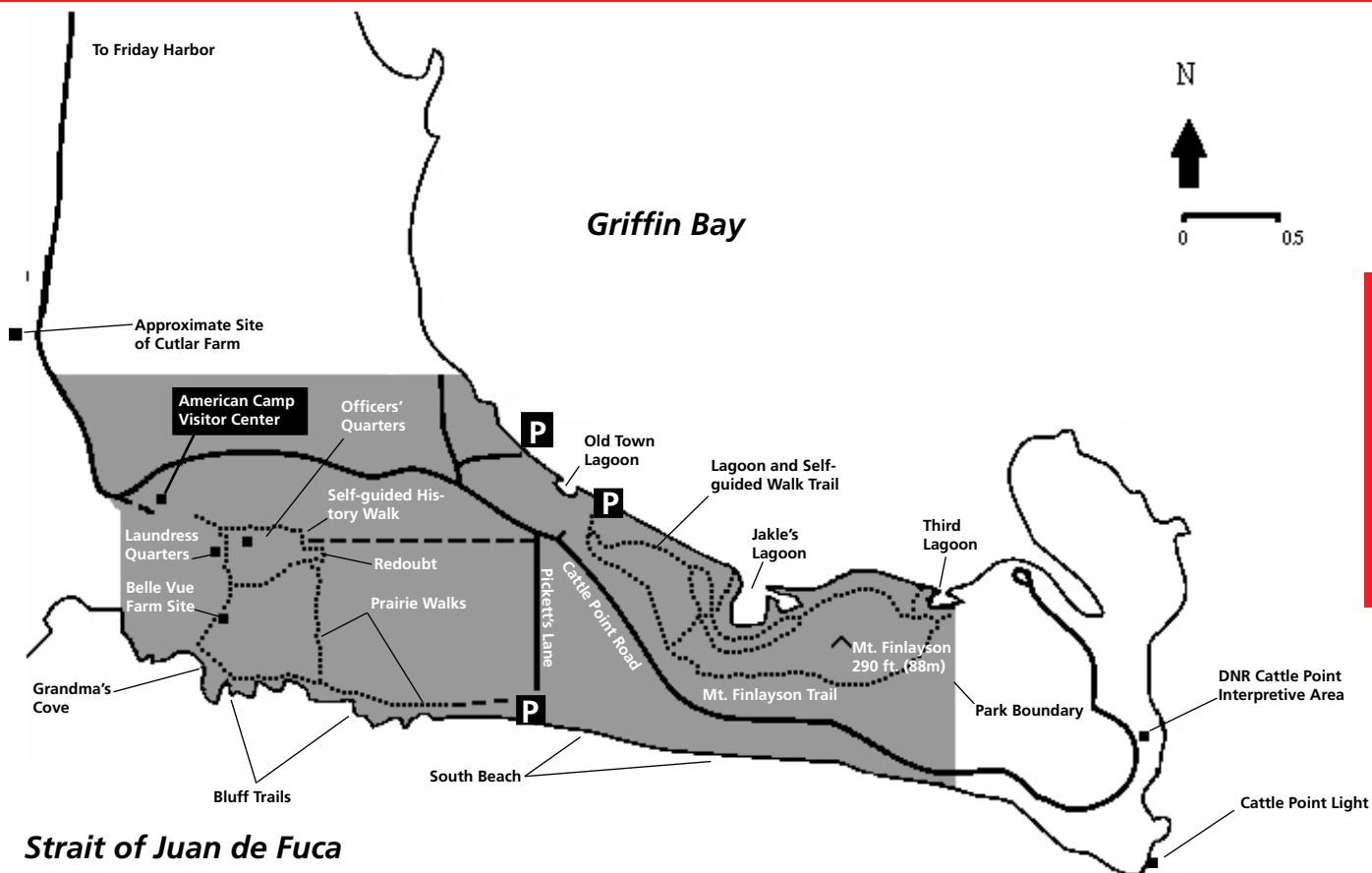
The Audubon Society Field Guide to the Bald Eagle.

American Cetacean Society Field Guide to the Orca.

The Restless Northwest: A Geological Study, by Hill Williams.

Free: *Guide to Native Wildflowers of American Camp*.

American Camp



Trails range from leisurely to strenuous. Ask a park ranger or volunteer about the best hike for you.

Strait of Juan de Fuca

Self-guided history walk—Relive the Pig War along the trail that starts and finishes in the visitor center parking area. Pick up guides in boxes at the trailhead and follow the numbers. (1.25 mi.)

Prairie walks—Primitive tracks crisscross the prairie and trace the bluff from Grandma's Cove to South Beach and back to the visitor center via the Redoubt. A great place for viewing Orca whales, the Redoubt also offers a regional perspective with views of Mt. Baker, the Olympic and Cascade ranges, Vancouver Island, and on an exceptionally clear day even Mt. Rainier, 130 miles up Admiralty Inlet. Sweeping views are also plentiful from the Cattle Point and Redoubt roads and Pickett's Lane. Walkers are advised to use caution as rabbits have excavated warrens throughout the prairie. (2.5 mi.)

Grandma's Cove—Stroll downhill to one of the finest beaches on the island. Use caution in descending the bluff. (.25 mi.)

Mt. Finlayson trail—Hike along the grassy ridge to the top of Mt. Finlayson where you can see Mt. Baker to the east, Mt. Rainier to the southeast, the Olympic Mountains to the south and Vancouver Island, British Columbia to the west. Come back the way you came or through Jakle's Lagoon. (3-mi. loop)

Jakle's Lagoon trail—Pick up a self-guided walk booklet, hike along the old roadbed and enjoy the quiet of a Douglas fir, cedar and hemlock canopy. This wooded area shelters deer and many types of birds, and is one of the most popular hiking areas on San Juan Island. (1.5 mi.)

South Beach—Walk along the longest public beach on the island. This is a great place to see an abundance of shorebirds, and in spring and summer, Orca whales. The beach is mainly gravel, so shoes or sandals are advised. Fires are limited to grates in the picnic areas. (2 mi.)

2007 Summer Program Schedule: (Continued from Page 5)

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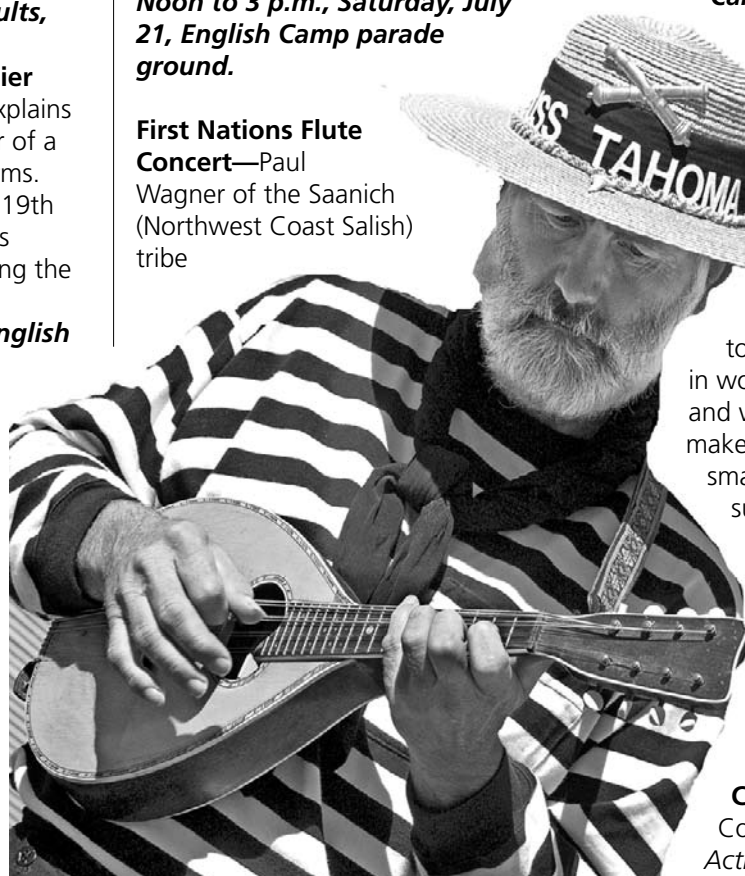
Theatre in presenting an evening of drama and song as George Pickett comes back to life to talk about his days on the frontier and Civil War battlefields. **Fridays, July 6 and Friday, August 24. All shows 7:30 p.m., San Juan Community Theatre. Tickets: \$10.00 adults,**

Gunsmithing on the Frontier
NPS volunteer Greg Hertel explains the attributes, use and repair of a variety of 19th century firearms. He also will discuss how the 19th century development of arms spurred changed tactics during the American Civil War. **1 p.m., Saturday, July 7, English Camp parade ground.**

The People of the Cedar—Richard Vanderway, education coordinator for Bellingham's Whatcom Museum, makes his seventh annual presentation in the park with an array of objects to provide a glimpse of Northwest Coast Indian culture. **2 p.m., Saturday, July 14, English Camp barracks.**

Northwest Pioneer Folkways Demonstrations—Janet Oakley, education coordinator for the Skagit County Historical Museum in LaConner, demonstrates pioneer folkways from butter churning to Dutch oven baking and other tasks. **Noon to 3 p.m., Saturday, July 21, English Camp parade ground.**

First Nations Flute Concert—Paul Wagner of the Saanich (Northwest Coast Salish) tribe



comes from a lineage of Shneh'em, medicine people who in healing use many tools, including music. Paul also plays the mbira and chipendani from Zimbabwe, digeridoo, guitar, bass and drum. He has performed extensively throughout the Pacific Northwest. **2 p.m., Saturday, July 28, English Camp parade or barracks.**

Coppice Crafts—Take home a garden accessory that you make yourself in this workshop on green woodworking. -- Roger Ellison and Anita Barreca will demonstrate some tools and techniques useful in working small round wood and willow rods. Participants can make and take home their own small coppice craft project, such as a plant teepee, trellis, or woven garden edging. **1 p.m., Saturday, August 4, English Camp barracks.**

Safe Passage: The U.S. Coast Survey Steamer Active on the West Coast in the 1850s—The Coast Survey Steamer Active not only performed

hydrographic surveys on coastal and inland waterways, but also played a key role in the settlement of the region. Historian Mike Vouri presents this program based on current research. **2 p.m., Saturday, August 11, English Camp barracks.**

Dresses, Drawers & More: The Importance of Dress and Style in the 1860s—Veteran Living Historian Sandee MacKinnon and Wendy Johannes will demonstrate first hand how complicated and time consuming dressing was for the 19th century woman. **1 p.m., Sunday, August 19, English Camp barracks.**

Encampment 2007—Join park staff, volunteers and re-enactors from throughout the region as they recreate life on San Juan Island at mid-19th century. The highlight of the weekend is Saturday's Candlelight Ball, an evening of dancing and refreshments from 7 to 10 p.m. **English Camp: Saturday and Sunday, August 25-26, All day.**

All programs are free and open to the public, except where noted. Programs are subject to change. For updates and accessibility information, call San Juan Island National Historical Park at (360) 378-2902 or (360) 378-2240; mike.vouri@nps.gov; or <http://www.nps.gov/sajh>.

Prescribed fire, winter storms and EarthCorps bring change to park

Young Hill prescribed fire scheduled for fall



Another in a cycle of prescribed burns is scheduled this year in English Camp to clear several acres of understory in the Garry oak forest on Young Hill. Burning as a way to restore the ecosystem has been practiced for centuries by First Nations people. It effectively eliminates

invasive exotic plants and allows native plants to thrive. Without burns, the prairie would convert to forest.

"We've done three prescribed burns out there in the last four years," said Peter Dederich, superintendent of San Juan Island National Historical Park. "That was preceded by a removal of a bunch of young Douglas fir trees, which were shading out the oaks."

Garry oaks are an important part of the park's history. Originally there were about 100 acres of Garry oak woodland inside the park boundaries. Clearing out the aggressive young firs will help restore the forest's ecosystem and reduce the chance of catastrophic wildfire.

Fire scars on some of the older Douglas firs is evidence they were subjected to fire before Europeans arrive on the island. "The San Juan Islands

appear to have a history of catastrophic wildfire, based on research and fire scar evidence," said Dederich.



The Young Hill controlled burn will be conducted by fire crews from the Olympic National park.

International crew aids Park storm clean up

After the big windstorm of November 2006, EarthCorps came to the rescue. They helped clear downed tree limbs from more than 6.5

miles of San Juan Island National Historical Park trails.

The volunteers—from Bangladesh, Bhutan, Columbia, Dominican Republic, Tanzania, Philippines and the United Kingdom—completed more than 422 hours of service in 10 days. Plus, they contributed to the Park's ongoing efforts to restore native grasses to the American Camp prairie by planting (in the driving rain) more than 13,000 plugs of native prairie grasses, weeding invasive plant species and establishing 30 research plots.

"We were just amazed that so few accomplished so much in so short a time," said Park superintendent Peter Dederich. "The first crew planted every single grass plug we had prepared, which allowed the second crew to work on storm damage, weeding prairie plots and trail brushing."

EarthCorps is a Seattle-based organization that has historically focused on environmental restoration projects in Seattle and King County. It recently expanded its program to include some regional locales such as San Juan Island.

Big Storms



Park maintenance worker Todd Narum was dwarfed by debris following the big winter storm in December 2006. Winds gusting to 90 mph knocked down more than 20 trees in the trail area. One 100-foot section of trail was buried under seven fallen trees that required Narum and Park maintenance chief Ken Arzarian five hours to clear. Luckily they had the help of a wood chipper. "It just ground 'em up and spit 'em out," said Arzarian. "The first year we had the chipper, we put 14 hours on it. But during that month after the storm, we ran it for 17 hours."

Prairie restoration underway at American Camp

Long-range project to restore native grasses

If current trends continue, American Camp's prairie may become only a memory. Native grasses and wildflowers are being crowded out by exotics (nonnative plants), and woody species are slowly replacing the grasslands. These changes are occurring because fire is no longer used as a way to regularly restore the prairie, and because Europeans who arrived in the 1850s introduced livestock and invasive, nonnative plants that continue to alter the habitat.

Why restore the prairie? The prairie in its original state is integral to the history of the park, which was originally established to interpret the story of the Pig War. Also, this type of landscape is becoming increasingly rare in the Pacific Northwest. "Nearly 95 percent of lowland Puget

Sound prairie habitat has been destroyed or heavily altered," said Peter Dederich, superintendent of San Juan Island National Historical Park. "We are trying to restore the native plant community not only to maintain one of the last remaining prairies for future generations, but also to preserve the habitat for many species that are rare and becoming rarer."

What would happen with no restoration? "Initially the nonnative plants would force out the natives," Dederich said. "The long-term prediction is that the prairie would all become forested. If you walk to the Redoubt, continue down the steps and look to the left, you'll see where Douglas firs are coming in strongly. That area has been prairie for 3,000 years, but is slowly changing."

How do native and nonnative communities differ? "There's a huge difference," Dederich said. "Native plants include wildflowers like camas, chocolate lilies, lupines, blue-eyed Marys and shooting stars, plus lots of native grasses. It's like a little garden. If you go to altered areas, you'll



The American Camp prairie looking toward Robert's Redoubt on a blustery day. Wildflowers abound here in April/May.

see thistle and three or four species of nonnative grasses that form mats so dense they won't support any other plant species."

Initial studies: Last year preparation began, which included inventory and monitoring of plants, small mammals and birds; mapping remaining concentrations of native plants; and observing the life cycle and ecology of the rare Island Marble butterfly. NPS fire crews prepared an area, just down from the Redoubt, for replanting by Friday Harbor home-school students (below right) and other volunteer groups. Planting will continue in this area for two more years.

Encouraging results: "Here at American Camp, we have one of the largest remaining pieces of prairie in Puget Sound at 600 acres," Dederich said. "When we mapped the patches of native prairie, we were pleasantly surprised at how much was left, considering the heavy pressure it has endured for 150 years."

Findings include three methods of restoration:

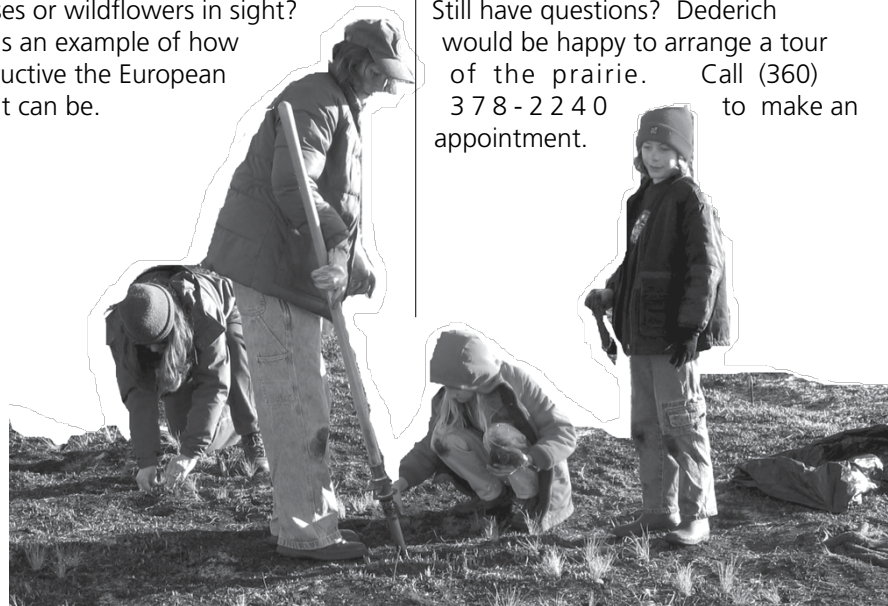
• **Removing invasive plants:** Methods to control invasive, nonnative plants include pulling them by hand and selective treatment with herbicides to eliminate the most resistant grass species. Among the targets are Canada thistle, Himalayan blackberry and tansy ragwort.

• **Planting native plugs:** Last year National Park Service biologists gathered seeds from the prairie for

cultivation. The tubes you see adjacent to the visitor center contain the native bunchgrass, Roemer's fescue, which is being transplanted in designated sites on the prairie. Newly planted plugs are taking hold in the area west of and below the Redoubt. This year additional grasses and wildflowers will be cultivated as well.

• **Burning designated areas:** Using fire as a way to encourage growth of valuable plants is a time-honored method that was practiced by the Indians. "Many native plants evolved in the presence of fire and need it in order to thrive," Dederich said. "For instance, chocolate lilies are one of the first plants that come back after a burn. There's no real substitute for fire. You can mow or cut back woody growth, but it never really completely duplicates the role of fire in restoring the ecosystem."

What about the rabbits? Have you noticed the barren "moonscape" along Pickett's Lane, the stretch with no grasses or wildflowers in sight? This is an example of how destructive the European rabbit can be.



A nonnative species brought to the island in the late 1800s, they are destroying the prairie by digging extensive burrow systems. Fencing constructed in recent years prevents them from entering certain areas targeted for restoration, and additional ways to control them are currently under discussion.

How you can help: You can contribute to prairie restoration in the park! Many groups and individuals are helping by:

- Growing native grasses and wildflowers at home.
- Transplanting plugs on the prairie.
- Pulling invasive plants such as tansy ragwort, thistle and blackberry.

If you would like to participate, call Chris Davis, chief of resource management, at (360) 378-2240.

Superintendent available for tours:

Still have questions? Dederich would be happy to arrange a tour of the prairie. Call (360) 378-2240 to make an appointment.

American Camp eagles' nest marks 12th year at center

By Susan Vernon

An active bald eagles' nest close to the American Camp visitor center provides a rare opportunity for the public to watch the big birds raise a family nearly every year.

The nest is anchored in an old, broken-topped Douglas fir that stands amidst a band of conifers forming a wind break upland of Haro Strait. The aerie is a massive structure of branches, sticks and vegetation nearly nine feet across and three feet deep—not a big nest compared to some others in the islands, but impressive nonetheless.

Bald Eagles are prominent members of the San Juan Islands wildlife community. They soar over the island scape on broad, dark wings and perch atop the conifers, often along the south-facing slopes of the rocky shoreline. Their gleaming white heads are an unmistakable field mark, giving the birds an authoritative air.

Long before European settlement of the islands, bald eagles held forth here. They were totem animals to the First



A bald eagle hovers over her young in the nest at the American Camp visitor center. All three eaglets fledged. At press time more young were on the way. The above (copyrighted) 2003 photograph was taken by NPS Volunteer Russ Illig.

People of the Northwest Coast, and images and stories of eagles figured prominently in their culture.

In 1792, Captain George Vancouver explored the archipelago during his Voyage of Discovery. The ship's naturalist, Dr. Archibald Menzies, wrote

of "white-headed eagles" perched in the trees along both sides of the shore and hovering over "the Arms."

When American Camp was established in 1859, the presence of bald eagles was cited in post reports. During the boundary survey of that era,

the exploration team even dined on bald eagle.

Now, nearly 150 years later, the majestic birds still claim the islands as their domain. The San Juans have one of the highest densities of breeding bald eagles in the lower 48 states. There are over 100 nesting pairs here. While many bald eagles are migratory, there is a resident population, too. More than one pair of balds reside in the vicinity of American Camp.

The nest is ideally situated to give the eagles a panoramic view of their domain. To the west, the inland sea is rich with salmon and other fish, seabirds and waterfowl; and to the south, prairie hosts rabbits, voles and snakes to feed upon. Griffin Bay, to the northeast, offers more opportunities for prey. Among the conifers, snags provide excellent perching sites for the big birds.

Fourteen eaglets have survived to fledge from the nest over the years. The life history of the adult pair using the site is unknown, for neither bird is banded. But because eagles mate for life and defend their territory year-round, it is relatively easy to monitor their activities.

BALD EAGLE FACTS

- * The scientific name *Haliaeetus leucocephalus* means white-headed sea eagle.
- * Eagles mate for life; if one member of the pair dies, the survivor may take a new mate.
- * Female bald eagles are larger than males. They weigh up to 14 pounds and have a wingspan of seven feet.
- * Balds, surviving to maturity, may live 15 to 20 years or more in the wild.
- * Eaglets fledge in approximately 10 to 12 weeks.
- * Eagles are opportunistic feeders. They prey upon fish and other marine life, birds, frogs, snakes and small mammals.

Eagles are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Possession of an eagle feather, or other body parts, is a felony with a fine of up to \$10,000 and/or imprisonment.

Where the wild things are

One of the most remarkable things about San Juan Island is its easy access to wildlife. Here is a sampling of what you may see in the park. Stop by the visitor centers for maps and books.

Land mammals



Columbian blacktail deer

Also known as a mule deer (*Odocoileus hemionus*), this is the largest land mammal in the San Juans, and native to the islands. They can be spotted almost anywhere in the park and on road-sides. Note their large, sensitive ears and tails—black on top and white underneath.

Red fox

Because the red fox can be orange, silver, black or any combination thereof, look for its distinguishing mark: a bushy, white-tipped tail.

Sea and shore

Orca whales

As you walk the bluffs of American Camp between April and September, listen for the soft spouting of an Orca. You can't miss them: a male's dorsal fin can be as tall as a man.

Dall's porpoises

Don't mistake these for the much larger Orca whale. They have similar markings, but are only about six feet long and have a smaller dorsal fin. When surfacing, they create rooster tails of spray.

Pacific harbor seals

Hike to the overlook above Grandma's Cove in American Camp and look down. You may see a seal or two on the rocks or in the water, heads up like periscopes. If you have a powerful scope, you'll see that their whiskers are beaded like strings of pearls.

River otters

If you think you see a sea otter foraging in the intertidal areas, look again. It's most likely a river otter. Look for them all along the American Camp bluff trail, at Jakle's Lagoon and in Garrison Bay at English Camp.



Intertidal creatures

Tide pools are especially rich with sea anemones, pink, purple and orange sea stars, sea urchins, crabs, periwinkles, dogwinkles, great tangles of kelp and the largest chiton in the world: the gumbboot.



Island Birds

With over 200 species and a varied habitat, many birders consider American Camp to be one of the best birdwatching areas in the state. In the woodlands, you'll find winter wrens, chestnut-backed chickadees and rufous hummingbirds. On the prairie, look for American goldfinches, great

horned owls and 18 varieties of raptors, from merlins to peregrine falcons to northern harriers. In spring, you'll also see Savannah sparrows and vesper sparrows. On rocky shorelines, listen for the piping calls of oystercatchers, and look for surf scoters in protected bays and rafts of seabirds on the open water. Pick up a checklist at the visitor centers.

Butterflies

A 2004 survey reported 32 species of butterflies on San Juan Island. First to arrive are sky blue Spring Azures, then Pale Tiger Swallowtails, Purplish Coppers, Silvery Blues, Brown Elfins, Two-Banded Checkered Skippers.... This is also home to the rare Island Marble butterfly, thought to be extinct but recently discovered on the island in 1998.

More information

For more information on wildlife in the park, please ask a park ranger or uniformed volunteer. They'll be happy to help. Also, visit our web-site at www.nps.gov/sajh. On the homepage, click on the "Nature and Science" link.

