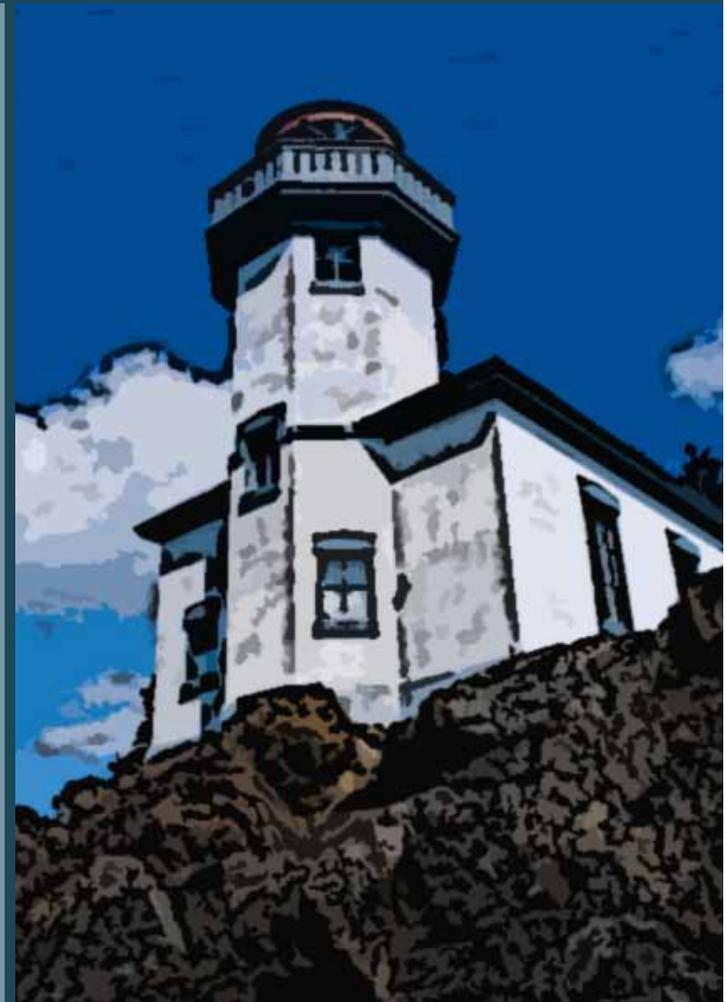


**PAST AND PRESENT  
CONDITIONS ALONG  
THE SCENIC BYWAY**

**3**





*Historic laundress quarters at the American Camp unit of San Juan Island National Historical Park*

## *The distinctive Pacific Northwest Archipelago Experience...*

of the San Juan Islands begins with the marine passage across the Salish Sea. As the byway extends onto the islands, scenic country roads wind through picturesque landscapes, quaint villages and hamlets, and other crossroads and destinations. Visitors have many opportunities to connect with the unique culture, history, and exquisite beauty of the marine and island environments that are part of the byway experience.

The islands have long been a haven for those seeking an escape from the rest of the world. Many places in the islands attract guests throughout the year, but particularly in the summer. Opportunities to be close to diverse natural

environments, from forests to beaches, and to view wildlife, from deer to orca whales, are part of the allure of this place. The mild climate, abundant recreation options, and opportunities for peaceful respite also attract people. It is no wonder that many visitors fall in love with the islands and return time after time, some choosing to make the San Juans their permanent or part-time home. Residents of the islands include artists, pilots, shopkeepers, teachers, writers, people who work in the fishing, agriculture, and timber industries, and others. The people of the islands whose families have lived here throughout time, as well as those who call it home today, contribute much to the rich story of this byway.

Through understanding and exploring the existing conditions in the San Juan Islands, unique resources of the byway can be identified, along with important needs. The existing physical conditions, history, and culture of the islands introduced in this section of the plan set the stage for the byway's story. This section also provides a review of existing plans and policies relevant to the San Juan Islands Scenic Byway.



*Hiker gazing at the San Juan Islands from Orcas Island*

## Natural History

The natural history of the islands, briefly summarized below, has influenced the spectacular scenic beauty and unique marine and geographic conditions that make the San Juans a world-class destination.

The San Juan Islands are thought to have originated as a result of partial submergence of a mountain range that crosses the area in a northwesterly direction. The islands and reefs represent the higher points in the range, while the valleys and ravines form the channels and harbors. The Puget Trough, which lies between the Cascade Mountains and the continental coast for the entire length of Washington state, from Canada to Oregon, is the basin in which the San Juan Islands are located. The Puget Trough is a glaciated feature, and the submerged mountain range within this basin that eventually became the islands may have once connected Vancouver Island to the mainland. During the Pleistocene Ice Age, all of the islands were covered by glaciers. In some areas, the ice may have been more than one mile thick. The region's highest peak, Mount Constitution on Orcas Island, bears glacial markings at its very top. The lowest point in the islands, a trench in Haro Strait, may have been carved out by the glaciers as well. Century by century, this huge ice sheet surged and crunched southward over the top of what eventually became the San Juan Islands.

Two distinct types of geologic landforms developed over millions of years in the San Juans. The first consists of bedrock domes thinly covered with late Quaternary (glacial) sediments commonly found on San Juan and Shaw islands, as well as Cypress



View of the Cattle Point landscape and the south end of Lopez Island

Island (in Skagit County). The second type, found on the islands of Lopez, Waldron, and Decatur, is composed of bedrock buried beneath sediments more than 300 feet thick in places. Neither formation is exclusive to any single island. Portions of Orcas, Lopez, and Waldron islands have surface exposures of bedrock, and parts of Orcas and San Juan islands have thick glacial deposits. Most of the intermontane valleys and lowland areas of the islands express a low, rolling topography and are underlain by a few feet to several hundred feet of glacially-derived sand, gravel, and clays associated with the advance and recession of the latest continental glaciers that rode over the area from the north and east. This is in sharp contrast to the mountainous terrain dominated by bedrock at or near the land surface.

Distinctive glacial erratics can be found in fields and forests across the islands. There are even places like the Cattle Point Interpretive Center where grooves can be seen from granite boulders (originally from the Canadian Rockies) that were dragged across native basalt layers during the glacial era.

## Climate

The climate of the San Juan Islands is mild, with about half the average annual rainfall as the Seattle area to the southeast and an average of 247 days with sunshine each year.

The climate is influenced by the mountains on the Olympic Peninsula to the southwest and Vancouver Island to the west and northwest. These influences create a “rain shadow” effect producing

less rainfall and more sunny days in the San Juans than many other areas in the region. Precipitation at sea level increases from south to north in the islands as the rain shadow influence dissipates. For example, the average annual precipitation at the south end of Lopez Island is 19 inches, while the northern portion of Orcas Island receives 30 inches average annual precipitation. Precipitation also increases with higher elevation producing a maximum average annual precipitation of 45 inches on Mount Constitution.

The maritime air surrounding the islands also moderates the climate. Summers are relatively short, cool, and dry, and winters are mild and moderately dry when compared to other areas in the Pacific Northwest. However, when cold, arctic air funnels down the Fraser River Valley from Canada, winter temperatures can drop dramatically. Average high temperatures in the summer are in the low 70s (Fahrenheit), occasionally peaking in the mid-80s. Average lows in the winter range in the high 30s, at times dipping into the low 30s/high 20s. Snow sometimes falls on the islands in winter, typically once or twice a year with accumulations of not more than one or two inches.

## Natural Resources

The natural characteristics of the San Juan Islands are extraordinary. Elevation and topography, soils, marine conditions and hydrology, vegetation, diverse ecosystems, and wildlife/marine life are summarized below.

### Elevation and Topography

Abrupt changes in elevation occur throughout the San Juan Islands and surrounding waters. The maximum height above sea level is found on Mount Constitution with an elevation of 2,409 feet. The deepest sounding recorded in the area occurs in Haro Strait near Stuart Island, with a depth of 1,356 feet below sea level. As such, the San Juan Island region presents an extreme relief of 3,765 feet. The topography throughout the islands is diverse, with rolling terrain and valleys between low hills in many areas. There are also areas of steep terrain as well as flatter or moderately-sloped prairies and pasture lands.

On Orcas Island, about one-third of the 57 square miles of the island is above



*View of Clark Island and other small islands in the archipelago from the top of Mount Constitution at Moran State Park*

500 feet in elevation, and about 14 percent is above 1,000 feet. Glacial influences in the terrain are evident throughout the islands. For example, Orcas Island is nearly cut into two islands by a narrow fjord-like harbor known as East Sound, which opens towards the south and merges with Lopez Sound.

### Soils

Soils in the San Juan Islands region are highly variable. Nearly one hundred types have been defined and described. They are typically rocky, coarse-textured, extremely well drained, and poor in nutrients. In many areas the soil layer is very thin. However, a few soil types,

such as those filling low-lying out-wash basins, are composed of extremely fine sand and clay. Most wetland areas in the San Juan Islands are underlain with these types of soils. The availability of clay soils has led to various pottery operations around the islands.

### Marine Conditions and Hydrology

Marine conditions include the saltwater environments. Kelp and eelgrass beds, spawning beaches, enclosed bays and rocky reefs provide diverse habitats for different life stages of many species of marine life. The marine environment is fragile, subject to many influences in water



*The great blue heron is commonly seen across the islands.*

and on land. Habitat destruction caused by shoreline development, overfishing, and the introduction of invasive, non-native species reduce the diversity and integrity of marine ecosystems. Because marine and upland ecosystems are connected, every local property and business owner has a role in determining the health of the marine ecosystem. Given these concerns, several organizations and agencies joined together to designate a Marine Stewardship Area and develop a Marine Management Workbook for that area. The workbook is designed to help local island communities and others identify sites for marine stewardship and apply management strategies. The Marine Stewardship Area was officially adopted by San Juan County in 2004.

The average water temperatures in the seas surrounding the San Juan Islands are fairly cold, ranging from 44°F in the winter to 51°F at the height of summer, in August. During periods of spring tides there can be a 13-foot tidal difference within a six-hour duration. Such a large variation in water levels is the result of nearly constant movement of a huge volume of water, creating strong and sometimes dangerous currents throughout the region.

Over 11,000 years ago, the final melting of the glaciers supercharged this area with groundwater. All available underground spaces were filled as meltwater percolated as deeply as possible into cracks, pores, and pockets within the bedrock. Today, all of the “resupply” or “recharge” of this groundwater comes from local rainfall. About two-thirds of the precipitation returns to the atmosphere by evapotranspiration. The remaining one-third runs off in small creeks, with the total runoff varying across the islands proportionately to precipitation. The most runoff is discharged from creeks in the Mount Constitution area of Orcas Island.



*Madrona trees line the rocky shores of San Juan Island*

Streamflow in the San Juan Islands is intermittent. The highest discharges occur from December through February, and usually very little to no flow occurs from late May or early June to late October or mid-November. Runoff is directly dependent upon precipitation, which varies with distance from the Olympic Mountains (the rain shadow effect) and relative relief within individual watersheds.

Lakes and ponds are found throughout the islands. Summit Lake, Mountain Lake, and Cascade Lake on Orcas Island receive runoff from the area around Mount Constitution, which is the wettest area in San Juan County. Summit Lake is formed by a small concrete dam at its southeast end. Water released from this reservoir flows into Mountain Lake.

Although surface water runoff in the San Juans is low compared to other areas in western Washington, surface water ponding of runoff in lakes, reservoirs, and dug pits is the primary source of drinking, irrigation, and stock water. Trout Lake and Briggs Pond on San Juan Island supply domestic water for the Town of Friday Harbor and Roche Harbor, respectively. Rosario on Orcas Island uses Cascade Lake. The Olga and Doe Bay water systems also on Orcas, depend on Mountain Lake. Eastsound uses Purdue Reservoir as a back up for well-water sources.

Wells in San Juan County are generally produced from two major aquifer types: glacial/interglacial aquifers and bedrock aquifers. Aquifers are geologic zones where groundwater is found and can be extracted. Most wells in the County obtain water from bedrock aquifers. Generally, groundwater flows radially outward from the centers of the islands toward the shorelines. Because of a high ratio of shoreline length to land area in the San Juans, there is an appreciable flow of groundwater seaward.

## Diverse Ecosystems and Vegetation

A diverse range of ecosystems exist in the San Juan Islands, including marine and coastal environments such as reefs and beaches, as well as inland wetlands and bogs, prairies, riparian areas, upland forests, and more. Ecosystems are drier at lower elevations and southward, and wetter at higher elevations and northward. The interplay of latitude, elevation, and patchwork soil types creates a great variety of microhabitats and plant communities. Several important habitats and ecosystems are highlighted below. Although the scenic byway only extends across two islands, there are 176 islands and reefs at high tide and 743 at low tide in the archipelago. San Juan County has more than 408 miles of rocky and sandy waterfront, with more shoreline than any other county in the nation and a little less than 20 percent of the total shoreline in the Salish Sea.

Eelgrass habitat is particularly important in the San Juan Islands because all 22 populations of Puget Sound Chinook Salmon (now listed as an endangered species) use the San Juans to grow bigger and stronger before their journey into the open ocean. Eelgrass habitat areas also provide shelter, feeding and rearing refuges for crab, rock fish, herring, sea anemones, marine worms, snails, limpets, other sealife and fish, and birds. Eelgrass beds have been in dramatic decline due to mooring buoys and other structures, as well as shoreline alterations such as bank armoring.

Shoreline vegetation benefits the marine ecosystem by providing shade for spawning fish. A recent study reported by the San Juan Initiative showed that 88 percent of the 1977 forest cover remains along shorelines of the islands. However, the greatest losses of forest cover in the islands overall have occurred along

armored banks of shorelines. This has altered beach environments and resulted in a loss of shading, leaf litter, and other organic material important to the shoreline habitat.

Feeder bluffs replenish beach environments with sand and gravel constantly being transported by currents, tides, and waves. Feeder bluffs are important contributors to beach habitats where there are spawning forage fish, as well as bedding material for eelgrass beds. Armoring and altering of feeder bluffs throughout the islands have

created concerns about potential impacts to shoreline habitats. Of the 4.5 miles of feeder bluffs in the San Juan Initiative's study area, 30 percent were found to have been armored.

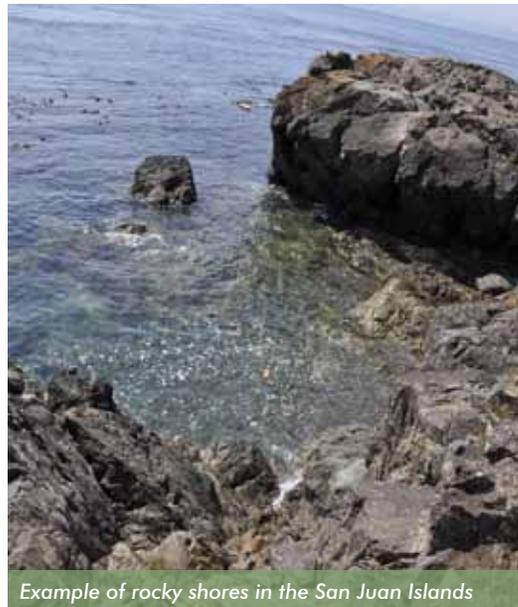
Sandy beaches throughout the islands provide important habitat for sand lance and surf smelt, which are forage fish and a basic food source for many species. Sandy beaches serve as incubators for these species' eggs. Research has shown that shoreline armoring has a direct impact on forage fish.

Rocky shores make up between 50 to 60 percent of San Juan Islands' shoreline. These areas may have kelp beds or rockfish habitats that require clean water and nutrients from adjacent lands.

Open, rocky outcrops with rocky knolls and steep slopes are a common feature, and plant communities in this terrain are survivors of extreme conditions. Lichens and mosses survive on bare rock, and grasses and herbs are common in pockets that retain some soil and moisture.



Old growth snag at English Camp



Example of rocky shores in the San Juan Islands



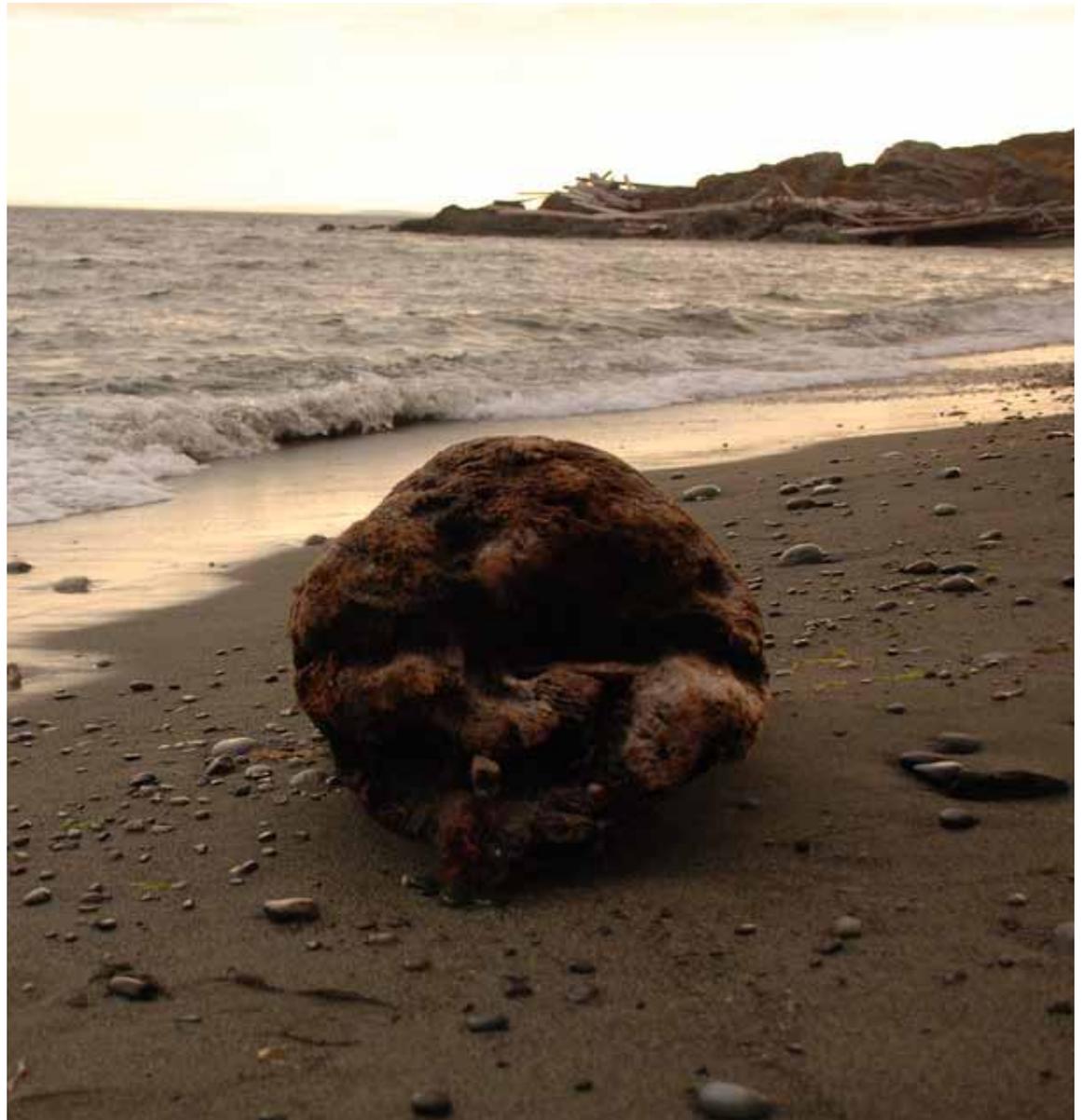
Camas flower at San Juan Island National Historical Park

Since the region's islands were exposed to the air by receding glaciers (estimated to have occurred about 11,000 to 13,000 years ago), there has been continuous colonization by plants and animals new to the area. Some have flourished, while others unable to compete or find a supportive niche have vanished.

Due to their isolation relative to the mainland, some long established plant and animal species are becoming uniquely diverse. For example, a study of the rare brittle cactus in western Washington has revealed the apparent biogeographic development of at least four different island "morphs" of this plant. On some islands the spines are larger and differently colored from the average individual. On other islands the pads have a new shape and color.

Wetlands on the islands range from limited emergent wet meadows to fresh water marshes and open water lakes. At the head of some shallow bays and lagoons, small estuaries and salt marshes of incredible productivity exist.

Naturally-occurring land cover in the San Juan Islands includes second-



*Drift log on Cattle Point Beach*

growth conifer forests, hardwood forests, scrub and shrub plant communities, and open prairies. Rock outcrops and beaches are non-vegetated land cover types that also occur naturally on the islands. Over 800 kinds of vascular plants have been cataloged in the San Juan Islands, two-thirds of which are native.

Due to conditions and influences unique to the San Juan Islands, ecosystems, vegetation, and the mix of wildlife using these areas for habitat can be distinctive from other places in Puget Sound and the surrounding region. For example, forests in San Juan County are much drier than those of the mainland Puget lowland. Many forested areas are lacking in underbrush and have an open canopy and park-like appearance. Douglas fir dominates in most areas but varies substantially in growth habit depending on environmental conditions. Forest character in the San Juan Islands changes from site to site as a result of wind, sunlight, soil type and depth, topography and moisture, as well as human management. Stands of large virgin timber, some over 300 years old, still exist in isolated pockets among the islands with exceptionally large specimens of Douglas fir, western red cedar, Sitka spruce, and big leaf maple. Other native trees such as western hemlock, grand fir, Pacific yew, and shore pine also exist.

The lime industry that flourished at the turn of the century relied on timber as fuel for kilns. This had a devastating effect on the forests of the islands. There are very few old growth areas left on San Juan Island, but some areas exist on Orcas Island.

Open prairies create a patchwork across the islands that contrasts with the forests. The prairies are typically found on the south sides of the islands and are well-drained sites subject to



*Walking trail through dense forest near Beaverton Valley Road on San Juan Island*

drying winds and exposure to the sun. Garry oak, Rocky Mountain juniper and Pacific madrona are able to anchor in the thin soils in these areas.

Prairies were once fairly common in the Puget Sound and Salish Sea regions. As glaciers retreated, grasses and other prairie plants were first to colonize the landscape. Exposure to harsh conditions of direct summer sun, drying effects of wind, and low precipitation in the "rain shadow" of the Olympic Mountains allowed the prairies to thrive intact. But landscapes constantly evolve in response to climate change, geologic processes, and human impact. In the San Juan Islands, when Europeans brought livestock and started cultivating the land, they upset the delicate balance created by native peoples, who routinely set the prairie on fire in order to maintain and enhance the growth of camas, a diet staple, and maintain the prairie ecosystem overall. Settlers introduced invasive, non-native plants that choked out native prairie plants and animals such as the European rabbit, which has transformed acres of delicate native wildflowers into barren landscapes.

These types of influences have affected natural prairie ecosystems throughout Puget Sound and Washington, and as a result only three percent of the historic extent of Washington's prairies still remain intact. The other 97 percent have been destroyed or heavily altered.

The Garry oaks/prairie ecosystem is unique and supports a number of rare and diverse species. In the San Juan Islands, Garry oaks fall at the northern limit of the species' range with many species

found here that are scarce elsewhere. Remnant patches of the Garry oaks/prairie ecosystem exist at the American Camp and English Camp units of the San Juan Island National Historical Park, as well as elsewhere in the islands. Prairies span nearly half the acreage at American Camp, from the bluffs along South Beach to the south-facing slopes of Mount Finlayson. When American naturalist C.B.R. Kennerly explored San Juan Island in 1860, his British and American hosts took him to see "Oak Prairie," the only oak



*A view of Mount Baker and Griffin Bay from the prairie at American Camp*



*Wildflowers color the serene prairie landscape.*



*California buttercups sprawling over the Garry oak/prairie ecosystem*

community he recorded during his explorations of the San Juan-Gulf archipelago in 1857-1860. According to contemporary maps, Oak Prairie was located at the head of San Juan Valley in what was (and is) plainly a seasonal wetland with deep alluvial soils. Today, oak prairies are found on Waldron and Samish islands, as well as other locations in the county.

The Garry oaks/prairie ecosystem often support or co-exist with rare species of plants such as California buttercup, golden paintbrush (listed as a threatened species by the Washington Department of Fish and Wildlife and US Fish and Wildlife), white meconella, erect pygmyweed, common blue-cup, Nuttall's quillwort, rosy owllover, coast microseris, white-top aster and annual sandwort. Garry oak communities also can include more common colorful species such as white fawn lilies, camas, chocolate lilies, and brodeacias. The predominant grass species found in the prairies and grasslands

of the San Juan Islands include Idaho fescue, blue wild rye, and Alaska onion grass.

Many of these species are culturally significant to native peoples. For example, Camas is considered to be the most important "root" food to Coast Salish peoples.

The Gary oaks/prairie ecosystem also supports wildlife such as the island marble butterfly, moss elfin butterfly, streaked horned lark, purple martin, and Townsend's vole.

The National Park Service (NPS) and other land managers are taking steps to restore prairies in the islands. The goal is to restore prairie communities dominated by native grasses and plants that support habitat for native wildlife and rare species. This goal is also compatible with NPS goals for cultural landscape preservation.



*The red fox is a non-native species introduced to San Juan Island in the 20th century. Photo by Julia Vouri, taken at San Juan Island National Historical Park*

## Wildlife/Marine Life

The diverse ecosystems and habitats in the San Juan Islands support an abundance of wildlife, including marine life and fish. The marine habitats are home to species of salmon, orca 'killer,' gray, and Minke whales, Dall's porpoise, steller sea lions, river and sea otters, lingcod, 26 species of rockfish, and approximately 150 species of marine birds.

There are three resident orca whale pods (J, K & L) that inhabit the waters, most frequently April through September. A subspecies of the resident orcas called transients, which are smaller in size, also inhabit the area and are seen year-round.

The Salish Sea orcas of the San Juan Islands are officially known as Southern Residents, and this distinct population was listed for protection under the federal Endangered Species Act in late 2005. The population experienced an alarming decline of almost 20 percent from 1996 to 2001, when only 79 animals were counted. At its peak in the 1990s, the population was as high as 97 animals. The National Oceanic and Atmospheric Administration (NOAA)



*Orca whales off San Juan Island*

Fisheries Service has been studying the population, and their research has confirmed that the availability of prey, pollution, and effects from vessels and sounds are major threats to the whales' health, as well as the whales' inherently small population size.

NOAA Fisheries Service has released a recovery plan for the region's orca whales. NOAA has stated that recovery of the region's iconic marine mammals will be a long-term effort requiring community support to help restore the

population to healthy levels. The plan identifies ongoing conservation programs and calls for action in a variety of areas, including improving availability of prey by supporting salmon restoration in the region, reducing pollution and contamination, and monitoring the effects of vessel traffic and underwater noise.

Over 291 species of birds overall have been recorded in the San Juan Archipelago, and it is one of the most important regional locations for breeding, migrating and wintering of seabirds.



American bald eagle

The habitats of the San Juan Islands support one of the largest bald eagle populations in the lower United States. There are more nesting pairs in San Juan County, 89 at last count, than there are in any other county in the state. One of the pairs has been nesting above American Camp since 1995.

The islands also host a rare golden eagle population. Other birds of distinction found in the area include loons, vultures, herons, peregrine falcon, merlin, purple martin, trumpeter swans, Cooper's hawk, and the marbled murrelet. Each year at English Camp, an osprey pair establishes a nest in a snag above the parade grounds. Visitors can track the progress of the young via a bird scope. Steller's jay was once found on San Juan Island, but post 1930 their distribution has largely been restricted to Orcas Island for unknown reasons.

Twenty-four different terrestrial mammal species, including river otter, mink, and Columbia black-tailed deer, are found in San Juan County. Deer populations in the islands vary by size and coloring. Deer on Orcas Island are typically smaller with more mottled white markings. Rabbits and foxes, both non-native species, can be seen in the open prairies of the islands. As mentioned previously, the European rabbits' damage to the natural prairie and grasslands has been a significant concern. Small mammals include the white-footed deer mouse, Townsend's vole, shrews, and other species. The northern flying squirrel was confirmed present on San Juan Island in 1995. Some sources suggest that this species and the Douglas squirrel (only found recently on Orcas Island and not elsewhere in the San Juans) were introduced to the islands. The eastern gray squirrel and eastern fox squirrel have also been found on Orcas

Island, as well as on nearby Crane Island, but are not typically found elsewhere. Beavers are found in some parts of Orcas Island and have been present on San Juan and Lopez in the past. Amphibians and reptiles that may be observed in the San Juans are the rough-skinned newt, red-legged frog, western toad, and northern alligator lizard. These species, as well as many birds and freshwater fish, rely heavily on the wet woodlands and riparian habitats scattered across the islands.

Several wildlife species in the San Juan Islands and surrounding waters are at risk, including orca whales (listed as endangered as discussed above), as well as Chinook salmon (threatened), coho salmon (species of concern), steelhead (threatened), Bocaccio rockfish (endangered), Cherry Point herring (currently unlisted but of concern locally) and canary and yelloweye rockfish (threatened). Several organizations and agencies have been working to improve nearshore habitat important for forage fish and salmon, such as eelgrass beds, canopy kelp areas, and shallow protected bays where smelt, sand lance, herring, and other species that are prey for salmon exist.



Island marble butterfly



Deer on San Juan Island

Other species of concern include the bald eagle, peregrine falcon, northern goshawk, northern sea otter, northwestern pond turtle, olive-sided flycatcher, Oregon vesper sparrow, valley silverspot butterfly, Pacific lamprey, river lamprey, western toad, both the long-eared and long-legged myotis, and Pacific Townsend's big eared bat.

The island marble butterfly, a unique sub-species of the large marble found east of the Cascades, is another example of a species at risk in the San Juan Islands. The species, known for its beautiful creamy white coloring with green marbling on the underside of its wings has been listed for possible designation as endangered, threatened, or sensitive. Once common in open grasslands and woodlands, the island marble was believed extinct for decades until one small population was found on San Juan Island in 1998. More recently, the island marble has been found inhabiting small areas on San Juan Island and Lopez Island. These are the only places in the world that this tiny creature is known to exist! Local agencies and organizations are working diligently to protect and restore habitat for the rare butterfly.



Lummi Tribe members carving totem poles in the late 1970s. Photo Mary Randlett ©

## Cultural History

The rich cultural history of the San Juan Islands spans the time from the earliest inhabitants—the Coast Salish peoples—through exploration and military occupation, to later settlement, industry, agriculture, and tourism. If you look closely, you can still see and experience remnants of this history at every turn of the byway.

### The First Nations

The San Juan Islands have been occupied by Coast Salish peoples (specifically Northern Straits Salish) for millennia. Over 9,000 years of human occupation have been represented in shell middens and other evidence found in the islands. According to tradition, the Songhees, Saanich, Lummi, and Samish all had winter villages in the southern Gulf Islands and San Juan Islands, as well as many permanent homes year-round. The Lummi and Mitchell Bay Indians consider San Juan Island to be their place of origin. Sheltered and protected from the environment, Orcas Island was home to several Coast Salish villages.

The First Peoples have always depended on the rich abundance of food and materials available throughout the San Juans and the Salish Sea. The seasonal and local availability of fishery resources has had a great impact on population movements and settlement patterns of the local tribes. In prehistoric and historic times, populations commonly disbanded and dispersed to locations where resources were seasonally available. Small units of people left their winter villages and migrated to optimal fishing and plant gathering areas during the summer months, where they resided in temporary lodges. Salmon played an important role in these travels as the people followed the anadromous fish from the ocean to the Strait of Juan de Fuca, to the San Juan Islands, and beyond.

The population of First Peoples in the San Juan Islands declined by over 80 percent within 100 years of the arrival of Europeans in 1774, due to the introduction of disease, as well as subsequent political relocations to mainland reservations.

Treaties of 1854 and 1855 ceded tribal lands and created reserved lands that amounted to only a fraction of the areas Coast Salish peoples had used prior to settlement. Many native women married European-American settlers in order to preserve access to their ancestral gathering places, and their descendents still live throughout the islands.

In spite of the challenges that affected the Coast Salish over the last two centuries, native cultures and traditions are strong throughout the region today. Several tribes maintain cultural and environmental resource programs in the islands. The Lummi own Madrona Point on Orcas Island. The Samish operate a salmon stream restoration program in the islands.



Coast Salish men paddling the Strait of Juan de Fuca

## PRESERVING OUR TRADITIONS

***“...we were resilient. We found a way to hold on. We fought to sustain our traditional territory. We held onto our language, our customs, our approach to life and our rights as a sovereign Indian nation –and slowly, through determination, wisdom and courage, we began to rebuild and prosper again.”***

From the Lummi Nation's book, *People of the Sea, LHAQ'TEMISH*

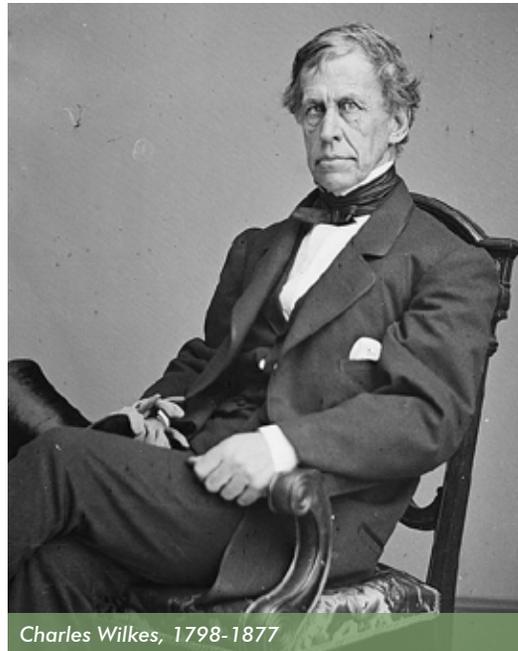


## Exploration, Military Influences, and Early Industries

In 1787, Captain Lopez de Haro and his crew became the first Europeans to sail among the San Juan Islands. The Haro Strait is his namesake.

The islands were first explored, charted, and named in the 1790s by Spain and Great Britain, and later by the United States. In 1791, Spanish explorers named San Juan Island after the Viceroy of New Spain and Orcas Island in honor of the viceroy of Mexico, a man of thirteen names, one of which was Orcasitees. Spain and Great Britain each staked claims to the Oregon Country, but Spain withdrew by 1800, and the British and Americans agreed to a joint occupation of the region in 1818. Charles Wilkes, commanding a US expedition from 1838-1842, mapped the islands and water surrounding Orcas Island and named Mount Constitution, at 2,409 feet, the highest point in San Juan County.

In June of 1846 the Treaty of Oregon was signed in London. The boundary was set along the 49th parallel, from the Rocky Mountains to the middle of

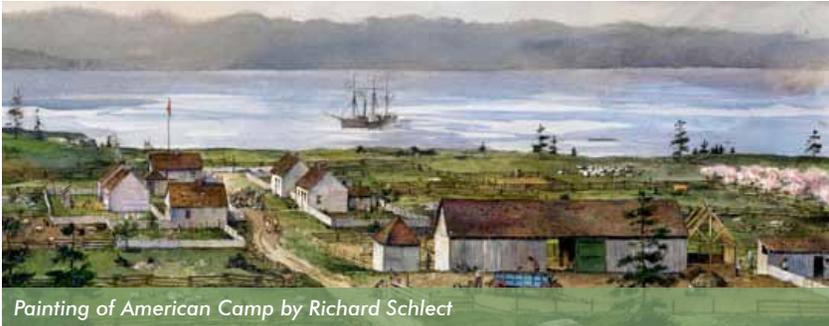


Charles Wilkes, 1798-1877

the "channel" separating Vancouver Island from the mainland, then south to the Strait of Juan de Fuca and west to the Pacific Ocean. However, there are actually two channels: Haro Strait, nearest Vancouver Island, and Rosario Strait, nearer the mainland. The San Juan Islands lie between both, thus, both sides claimed the entire island group. The United States and Britain then both established military encampments on San Juan Island (American Camp and English Camp). In 1871, following

the "Pig War" crisis and joint military occupation of San Juan Island (described in more detail on the next page), the boundary question was submitted for arbitration to Kaiser Wilhelm I of Germany, who a year later ruled that the islands belonged to the United States.

People began to settle on the islands as industries such as logging, fisheries, lime kiln operations, and agriculture thrived. The awe-inspiring setting of the San Juan Islands and the potential to develop these industries attracted people. In the late 1800s and into the early to mid-1900s, more people began coming to the islands as permanent or seasonal residents or visitors. Tourism started in the late 1880s when "health lodges" were established on Lopez and Orcas. Additional resorts and vacation communities developed across the islands in subsequent decades. During the Great Depression, both San Juan Island and Orcas Island experienced a lull in activity, but by the mid-1900s Americans started taking more road trips and vacations, particularly after WWII, and the lure of the San Juan Islands as a Pacific Northwest vacation destination intensified. More retirees started to come



*Painting of American Camp by Richard Schlect*



*Early photo of soldiers at American Camp*

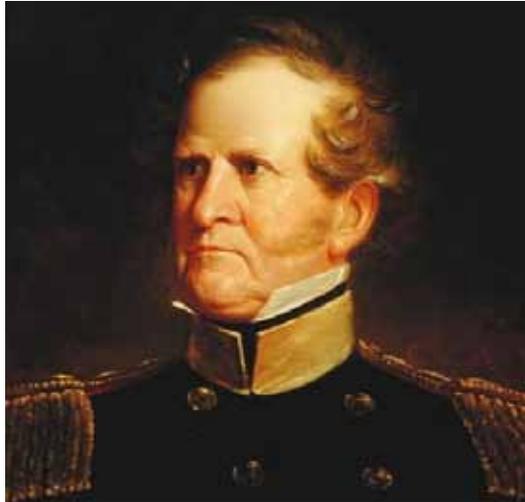
to the islands in the 1960s and 1970s, and the affluent began building vacation homes. Today, tourism, construction, and real estate continue to be key industries on the islands, along with some small-scale local agricultural operations.

## San Juan Island Settlement

By the mid-1800s the Hudson's Bay Company (HBC) was one of the world's first international business conglomerates trading in raw materials. The HBC established forts at what is now Vancouver, Washington, as well as throughout Oregon and northern Washington, Canada, and Alaska. Their trade routes saw the export of beaver pelts, salmon, timber, wheat, and other products to faraway places, including England, the Hawaiian Islands, Asia, and Russia. In 1845, four years before the California Gold Rush, the HBC posted a notice of possession on San Juan Island and established a salmon salting station on the Cattle Point Peninsula in 1851. The HBC purchased salmon from the native people, barreled and salted it, and shipped it throughout the Pacific Rim.

Although some sources say the HBC built a log trading post at Roche Harbor, there is a lack of historical evidence to support this claim.

HBC's presence on the island continued, and in 1853, British Chief Factor James Douglas and HBC employees imported over 1,300 sheep to graze on an expanse of prairie on the southern tip of San Juan Island, on the site of today's American Camp. Word of fertile soil and grazing lands spread and by 1859, eighteen Americans had settled claims that the British believed were illegal. Thus tensions began to rise and came to a head in 1859 when American Lyman Cutlar, who had settled near Belle Vue Farm, shot a HBC pig rooting in his garden. The British threatened Cutlar with arrest and the other Americans with eviction from San Juan Island. In response, a company of US Army infantry commanded by Captain George E. Pickett was ordered to the island. The 64-man unit landed on the island on July 27, 1859. British Governor James Douglas dispatched Royal Navy Captain Geoffrey Phipps Hornby and three warships with 62 total guns, 400 Royal Marines, and fifteen Royal Engineers with orders to dislodge Pickett but avoid an armed clash. Pickett refused to budge and more reinforcements for the Americans were sent on August 10. By then, 461 soldiers occupied the island, erecting fortifications while the British watched from the bay. British naval policy dictated that Hornby was to fire only if fired upon.



Lieutenant General Winfield Scott, 1786-1866

Word of the crisis reached the US capitol, Washington DC, six weeks later, and the US government sent Lieutenant General Winfield Scott to contain the affair. He and Douglas agreed to reduce their forces to no more than 100 US soldiers and a single British warship. On March 21, 1860, the Royal Marines landed and set up English Camp on Garrison Bay, thirteen miles northwest of American Camp. For the next twelve years, San Juan Island would remain under peaceful joint military occupation. After Kaiser Wilhelm I of Germany ruled that the islands belonged to the



Lieutenant Henry Martyn Robert, 1837-1923

United States, the Royal Marines left in November 1872. The US troops left two years later.

Second Lieutenant Henry Martyn Robert of the US Army and graduate of West Point (class of 1857), engineered the redoubt, an earthen fortification at American Camp constructed during the joint occupation era. Construction of the redoubt sent a clear signal to the British that the Americans intended to stay on the island. Robert, like Captain Pickett and Winfield Scott, went on to serve in the Civil War, but his most renown

accomplishment was penning *Robert's Rules of Order*, the first edition of which was written in 1876.

Friday Harbor was charted in 1857-1858 by Captain George Richards, RN, who called it "Friday's Bay," presumably after a Hawaiian shepherd, Joe Friday. Hawaiians, then called "Kanakas," had lived and worked on the island 20 years before town founder Edward Warbass erected a shack along the shoreline. They came to tend sheep for the Hudson's Bay Company, and Friday ran the sheep station at the time.

By the time the San Juans were awarded to the United States in 1872, Warbass was elected to the Washington Territorial legislature, where he used his political power to break off the San Juan Islands from Whatcom Country. Warbass saw the potential of "Friday's Bay" as a deep-water anchorage, sheltered from the storms that blew into San Juan Town, on the south end of Griffin Bay. In 1873, Friday Harbor was named the county seat of San Juan County, and a 16-by-24-foot shack was erected to serve as a county courthouse and residence.

After failing to attract any fellow residents to his new town, Warbass gave up and returned to the 1875 legislative session. John A. Bowman of Orcas Island took over the “courthouse” and vowed to do better. It wasn’t until Joseph Sweeney joined forces with Bowman and bought 45 acres of the current downtown Friday Harbor and waterfront for a mere \$171 that change began to happen. The transaction so outraged Warbass that he vowed never to return to Friday Harbor. Businesses and residences began to appear and in 1909, the Town of Friday Harbor was incorporated. Since then, Friday Harbor has remained the only incorporated town in the islands.

Some of the area's most important working boats were built on San Juan Island. In 1910, Albert Jensen, one of four brothers who were successful boat builders and sawmill owners in Friday Harbor, left the business to launch Jensen & Son Shipyard just down the road from Friday Harbor. Albert Jensen and his son, Nourdine, built more than 150 fishing boats, tenders, and tugs at the current location.

The shipyard’s first boat, the Nereid, was used as a tender and buyer for the Friday Harbor Packing Company, a substantial salmon cannery which once operated where Washington State Ferries' vessels dock today. The Nereid was a sleek and beautiful vessel. After many years of service, the Nereid was broken up, but her wheelhouse was salvaged and now rests in a yard, visible from Argyle Avenue.

Another Jensen boat was the second Islander, a steamer and the largest vessel ever constructed in the San Juans. Known later as the Mohawk, she served as a passenger and automobile ferry, and during WWII, as a tug. Before the war, the boats built by the Jensens were commercial. After the war, most of the boats were pleasure craft. Educated as engineers, the Jensens built boats of their own design, but they also built boats designed by famed marine architects Bill Garden and Ed Monk. Albert, and his son Nourdine after him, ran the shipyard for over 100 years, making the business the oldest family-owned business in the county still in business today.

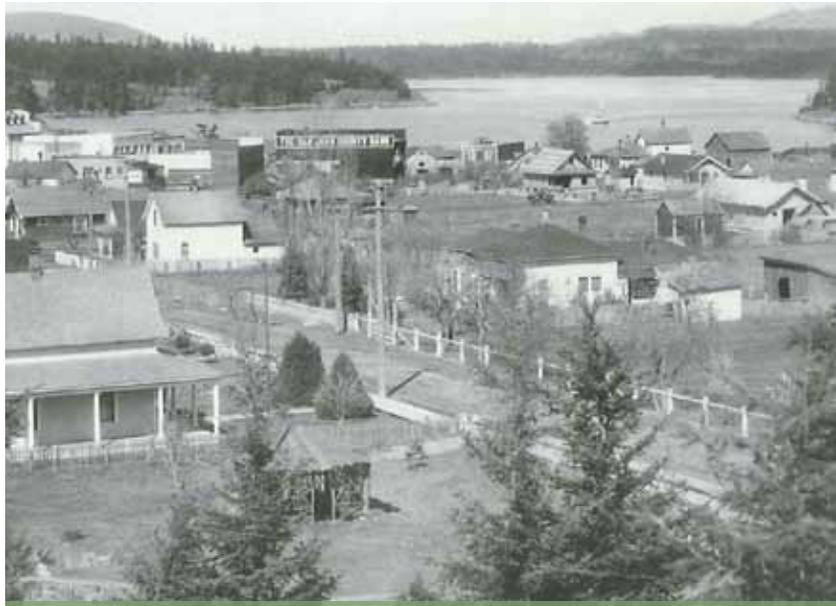


Home of John S. McMillin, circa 1920



It is believed that Hotel de Haro was built around an existing log bunkhouse in 1887.

The Tacoma and Roche Harbor Lime and Cement Company was originally founded by John S. McMillin at Roche Harbor in 1886, continuing the work in the lime quarry that was started by British soldiers during the Pig War crisis. A ledge of limestone was found lying at an angle of 45 degrees and extending three-fourths of a mile from Roche Harbor across the peninsula to Westcott Bay. By analysis, it was found to be the purest in the world. From the old-fashioned stone kilns, McMillin built his empire into the largest limestone plant west of the Mississippi. The company owned over 3,000 acres of land upon which they conducted two ranches, raised hay, oats and root crops, cattle and hogs. Firing the kilns required voracious consumption of fire wood. As such, old growth trees across San Juan Island were logged. (The forests on Orcas Island are older as a result.)



Overlooking Friday Harbor, circa 1900

The community of Roche Harbor consisted of a modern lime quarry, a barrel works, warehouse, docks, ships and piers, offices, company store, church, school, barns, and homes. At its peak, Roche Harbor boasted about 800 residents. The workers at Roche Harbor were paid in scrip, good only at the company store and still being used when the town was sold as a resort in 1956. Today, many of the remnants of the old quarry workings and the town are still visible and interpreted at Roche Harbor.

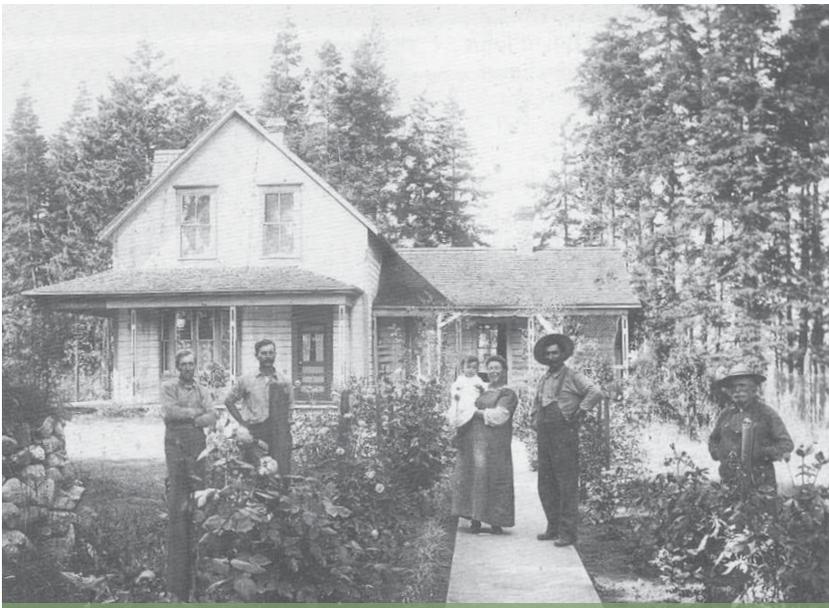
The Hotel de Haro was originally built in 1887. The hotel is believed to have been built as the site of the Scurr brothers' bunkhouse. Some of the timbers used in the bunkhouse construction are still visible today. The hotel was later remodeled to provide twenty guest rooms for McMillin's customers while they were negotiating the purchase of lime. It is believed by some that President Theodore Roosevelt visited his long-time friend, McMillin, in 1906 and stayed in Room 2A, which has since been known as the Presidential Suite. The hotel register bearing the President's signature, which he signed during a second visit in 1907, is on display in the hotel lobby. (Some historians have questioned Roosevelt's first visit, citing evidence that he was elsewhere at that time.)

In 1956, all 4,000 acres of Roche Harbor, with twelve miles of coastline, was sold to Reuben J. Tarte, a Seattle businessman. He and his family restored the hotel and warehouse, turning the area into a world-class resort. In 1988, the Tartes sold Roche Harbor Resort to a locally-based corporation, and the resort continues to offer a blend of old-world charm and up-to-date amenities to visitors and boaters from all over the world.

During the 1930s Great Depression, islanders fared reasonably well because they were largely self-sufficient and became accustomed to bartering with and helping each other. Life moved at a slow pace until the late 1960s, when those with economic prosperity began building vacation homes and more retirees moved to the islands. By 2010, Friday Harbor was home to more than 2,000 people, with more than 4,000 other islanders living in the unincorporated areas of San Juan Island.

## HOMESTEADING

Homesteading and a long history of agriculture have influenced San Juan Island's culture and development. After 1872, when the boundary dispute between the United States and Britain was



The Rosler family and farmhands pose in front of their homestead near American Camp.

finally settled in favor of the former, American farmers were eligible to apply for either preemption claims or homesteads. Under the Homestead Act of 1862, the head of a household could apply for a 160-acre homestead and, after occupying and working the land for five years, and providing proof thereof ("proving up"), receive title to the land. From 1875, when the survey of the islands was finally completed, until 1920s, when most arable land had been claimed, some 749 claims were filed in the county, with the majority occurring between 1890 and 1894.

Farming during the early homesteading period (1870s to 1900) was largely of a subsistence variety. The typical homestead of 160 acres or less consisted of a log cabin residence—later replaced with a one-and-a-half or two-story frame house— together with roughly-built cluster of agricultural outbuildings: a barn, chicken house, root house, store house, and granary. A small plot of land, usually 7 or 8 acres, was cultivated and planted in peas, potatoes, and turnips as well as general vegetables, while a larger field of 40 to 60 acres was cleared, grubbed, ploughed, harrowed, and then planted in timothy for pasture. A small orchard of several dozen trees, usually apples and pears, was also common. Typical farm animals included chickens, hogs, cattle (both beef and dairy), and sheep.

The first county fair was held in a cleared cannery building in Friday Harbor on September 27, 1906. The Friday Harbor Journal worried that not all attendees would find lodging: *"It should be the duty of Friday Harbor to see that all who attend the fair are comfortably sheltered and have enough to eat. To this end our homes should be opened if necessary."*



*Historic barn on San Juan Island*

## AGRICULTURE

A variety of agricultural activities shaped the growth and industry of the San Juan Islands, as further described below.

**Hay/Grains**—Homesteaders harvested hay for their animals from the very start, but grain farming began to develop gradually through the last quarter of the nineteenth century. Crops included barley, oats, wheat, and dry peas. According to the agricultural census, total county acreage planted in oats reached a high of 2,104 in 1900. Barley and winter wheat were never as extensive,



Homesteaders harvested hay and grains.

although the former peaked at 1,007 in 1930, while the later peaked at 863 acres as late as 1959. The wetter, less-poorly drained soils of San Juan and nearby Beaverton Valley proved to be excellent for some grain production because of the retention of moisture during the long, dry summer season.

By 1886, there was enough grain production to prompt a group of men from Port Townsend to establish a mill at Argyle, a shallow water port in Griffin Bay. This three-story (with basement and superstructure for accessing equipment) mill was powered by steam and ground the various grains—barley, oats, and wheat—on millstones; later, it even processed split peas. Eventually a kiln was added to the site for prune drying. However, the mill closed in 1909 due to lack of business.

Threshing of grain was a community effort, and steam threshers were either hauled from the Argyle Mill or barged over from Lopez. Crews of men from the various surrounding farms would meet at the fields to be threshed, and farm wives would vie with each other to provide ample lunches for the workers. Grain was put in sewn sacks. Grain production led to the construction of sturdy, almost windowless, vermin-proof granaries, a few of which are still in evidence on the island.

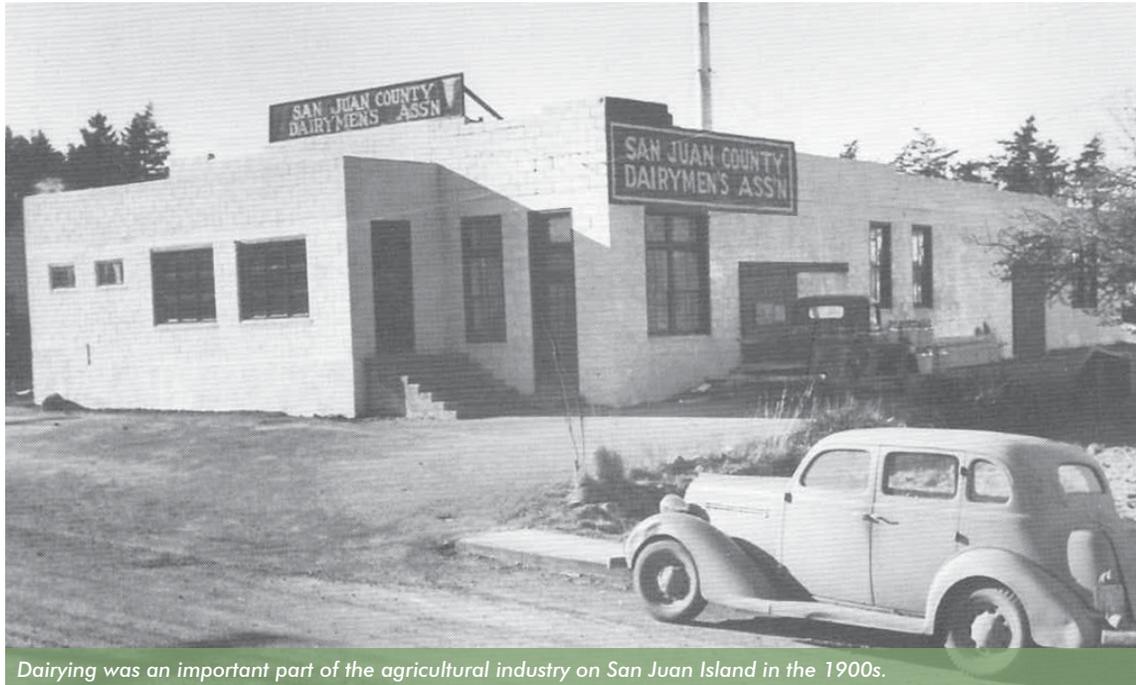
**Orchards**—The earliest orchards were planted by homesteaders in the mid- to late 1800s. The homesteaders typically cultivated a variety of species in order to have fruit on the table for a longer period of time. A mixture of pears, cherries, apples, apricots, and wild plums came into harvest sequentially spanning the summer and fall seasons. Eventually fruit-growing became a more commercial endeavor, with

orchardists in the islands growing a significant supply of fresh fruit that was shipped to markets in the Seattle area (including Pike Place Market). In 1907, an estimated 72,000 boxes of apples (at 80 cents per box) were shipped off island. Pears ranked second as a cash crop, with an estimated 12,000 boxes going to market (at \$1.25 per box). In the mid-1900s, irrigation was developed along the Columbia River in the drier inland valleys of Central

Washington, and that region became the more predominant fruit supplier to the Seattle area and other markets. Since that era, fruit production greatly declined in the San Juan Islands, but today, a few small fruit-growing operations still exist. Remnants of the historic orchards, including a few patches of old scraggly trees, as well as some orchards that are being restored with new trees, can be seen across the islands from the byway.

**Dairying**—Although practically every homestead had a milk cow or two early on, dairying soon became an important element in the agricultural landscape of San Juan Island. The number of dairy cattle county-wide gradually rose from 247 in 1880 to 443 in 1890, 774 in 1900, 1,916 in 1910, and 3,175 in 1920. Increased dairy production in turn led to the establishment of a creamery in Friday Harbor in 1901. Three years later, the local newspaper reported that 3,000 pounds of cream had been converted to 1,000 pounds of butter in one day, and that the creamery was so busy it had to introduce a night shift to run 24 hours a day. By 1907, the creamery produced 120 tons of butter annually. With the introduction of the first county agent in 1921, there was a big push to improve stock through selective breeding, animal health through tuberculosis testing, and production through cream content testing. The formation of the San Juan County Dairyman's Association in 1924 helped this movement by providing a forum for farmers to discuss improvements.

State regulations regarding dairy production also led to changes in farmstead and building design. In 1895,



Dairying was an important part of the agricultural industry on San Juan Island in the 1900s.



Pea-shelling machines were used in the 1960s to process canned and frozen peas (Friday Harbor).



Wagon team on Spring Street in Friday Harbor

a “Law Relating to Dairy Products” was passed, which mandated the labeling and dating of butter and established the State Food and Dairy Commission. Following World War I, major legislation was passed in 1919 to regulate dairy layout: it mandated clean water, sanitary equipment, whitewashed areas, and a separate milk house fifty feet from any filth. This led to the construction of clean, whitewashed stalls and stanchions with gutters for flushing manure and urine out of the barn. Separate milk houses were also built, and, after the introduction of concrete, troughs were constructed to hold cold water in which the ten-gallon milk cans were kept cool.

Technological changes also affected San Juan Island dairying. The introduction around the turn of the century of the Babcock Tester,

which measured the butterfat content of the milk from each cow, enabled dairymen to improve their stock selectively. Around the same time, Gustaf de Laval invented the centrifugal home separator, which enabled the individual farmer to separate the cream on the farm. Mechanical milking machines, which had been invented as early as 1875, became available in the region in the 1910s. All of these helped the farmer improve their stock and production.

**Peas**—Dry peas had long been an island farm staple, and the market for split peas during periods like World War I bolstered pea production in the county. Argyle Mill even adapted its operations for pea production. In 1922, vines were introduced by John M. “Pea” Henry to San Juan Valley for the production



Early aerial view of Friday Harbor from the mid-1940s

of green peas for canning. Henry established a cannery, with the brand name “Saltair Peas” the following year.

Henry’s company supplied farmers with both seed peas and the large mechanical viners that were used to process the pea plants; at one time there were at least a score of the giant machines located throughout the Valley. These took five or six men to work. Farmers grew about two tons of peas per acre, and sold their crop at \$60 per ton.

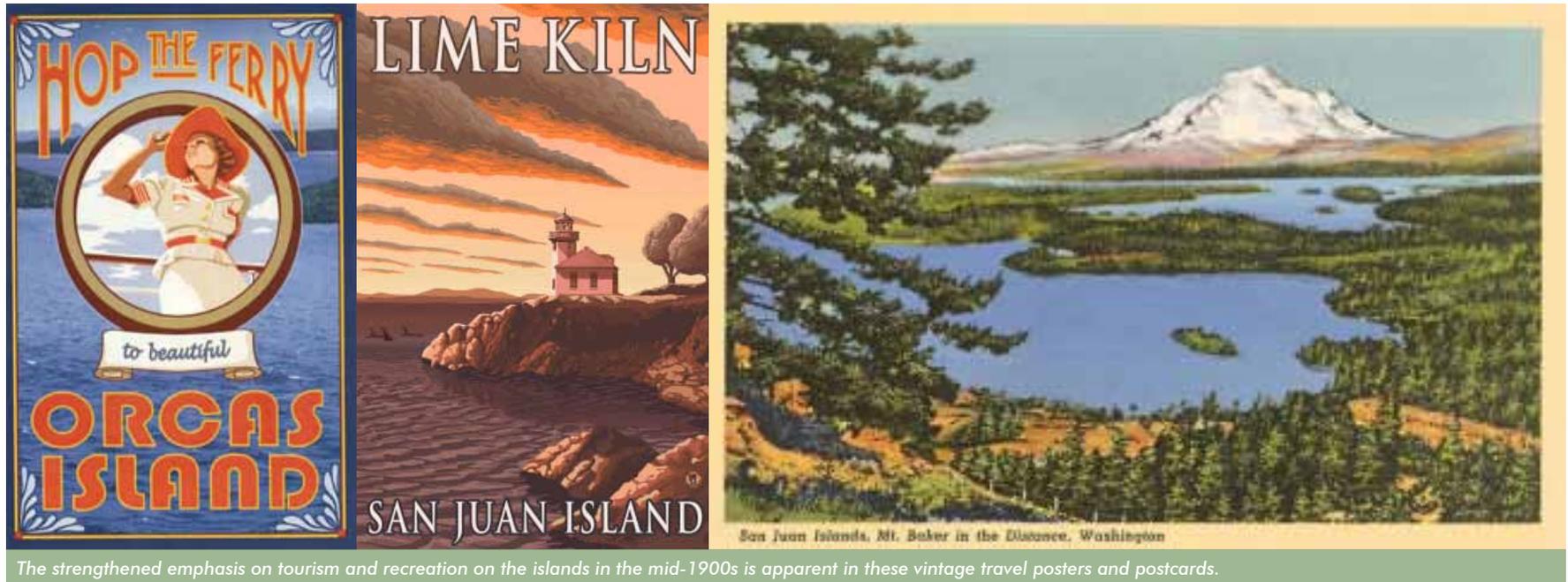
In 1940, a beetle called a “pea weevil” began to attack the plants, and within a few years the crop was totally abandoned. Peas were revived in 1956, when George Jeffers and his associates who operated the Friday Harbor Canning Company (the fish cannery) bought San Juan Valley Farms and grew about 450 acres of peas a year. This time, the operation took advantage of chemical pesticides. There was even cropdusting by airplane and a freezer unit at the cannery. This operation lasted

intermittently until 1966, when the last peas were harvested.

***Agriculture in Modern Times—***

After World War II, the agricultural landscape of San Juan began to change once again. After experiencing the wider world during their stint in the Armed forces, island farmers returned and began to change. For instance, although tractors were introduced to the islands as early as 1924, most farms continued to use draft horses prior to the War. After reaching a high of 1,102 in 1920, the number of horses and mules in the county declined in the next several decades, but was still at 499 in 1940. However, it dropped precipitously after the War (1945) to 288, and by 1954 there were only 85.

With an increase in tourism and summer homes, the island economy began to change, and farmers, who had already struggled with getting their crops to market off-island, found it increasingly difficult to compete with the mainland. In 1954, agricultural labor constituted only 25 percent of the county work force. Large-scale farming began to disappear.

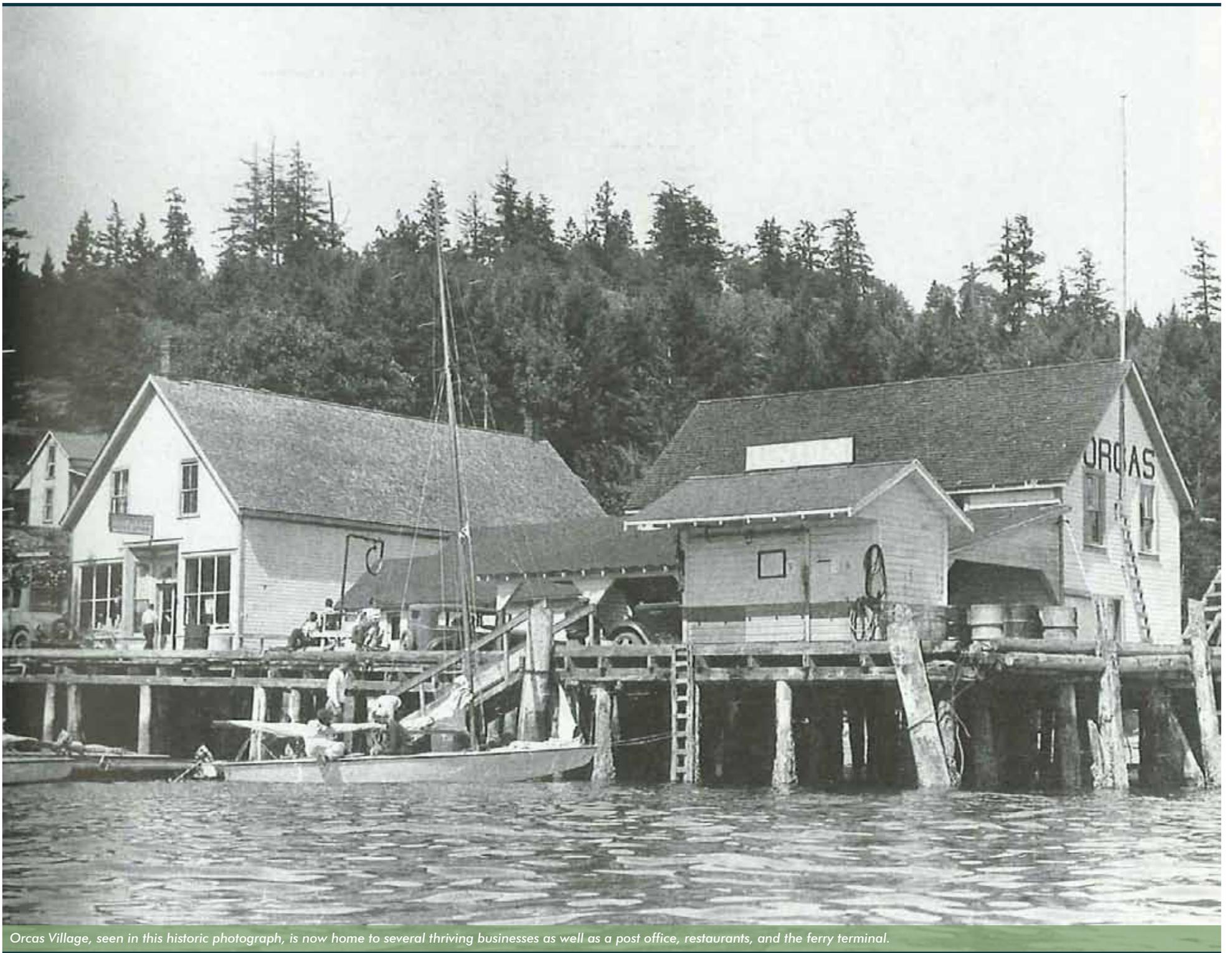


In 1949, federal and state laws changed the pricing structure and marketing requirements for dairy goods. The industry became more difficult for smaller-scale dairy operations. Dairy cattle, some 3,000 strong on the island in 1954, declined to 372 just five years later. The creamery in Friday Harbor closed in 1962. During the same period, beef cattle (less labor-intensive) rose from 400 in 1950 to almost 2,000 four years

later, and have fluctuated from 1,200 to 2,000 plus during the years since then.

Within the last few decades, San Juan County agriculture has been on the rebound, albeit in different forms from the past. According to the USDA, from 2002 to 2007 farms in San Juan County grew 29 percent in number (225 to 291) and 25 percent in total acreage (17,146 to 21,472); average size (in acres) decreased slightly. Most

of this growth was in small farms: those one to nine acres in size grew from 32 farms in 2002 to 42 farms in 2007. The number of farms of ten to forty-nine acres in size grew from 119 farms in 2002 to 155 farms in 2007. Many of today's farms produce vegetables, eggs, and meats to supply farm stands, seasonal farmers' markets, local restaurants, and community supported agriculture subscriptions.



Orcas Village, seen in this historic photograph, is now home to several thriving businesses as well as a post office, restaurants, and the ferry terminal.

## Orcas Island Settlement

Prior to Euro-American settlement, Coast Salish peoples (specifically the Northern Straits Salish) lived in various villages around the San Juan Islands, including on Orcas Island. Shell middens representing generations of occupation are visible at various Orcas Island beaches. The Lummi lived in a large village, Tsuhl-whee'k-seeng, near present Eastsound, as well as at least ten other villages throughout the islands at the time of the 1855 Treaty of Point Elliott.

To the First Nations, the Salish Sea was, and is, an integral part of their culture and existence. Rich marine resources have provided daily sustenance and economic opportunities. The resources at Orcas Island are no exception. At one time, the clams from West Sound were so prized that Salish from all over the region could identify them from the patterns of the shells.

The first non-Indian residents on Orcas were two men sent by the HBC in Victoria to hunt deer on the island. The men enjoyed the island greatly, and left the HBC to build cabins and make Orcas their home. Over the years, many other HBC deer hunters homesteaded on the island. Settlement on Orcas grew slowly compared to San Juan Island. During the California Gold Rush, a number of miners stopped by the islands enroute to Alaska and either stayed behind or returned from Alaska after their gold rush adventures to settle down on the island. More settlers arrived in the 1860s, enjoying the remoteness from the Civil War, which was consuming the rest of the United States. The settlements that developed on the island were small collections of log cabins, scattered throughout the island. The favored mode of travel between homesteads was by boat, which was much easier than tackling the rough and forested island terrain.



This Lummi village may have been similar to Tsuhl-whee'k-seeng, one located near present Eastsound.

## COAST SALISH HOMELANDS

***“The Salish Sea has provided travel ways for our ancestors and people for generations. It is part of our past, present and future.”***

*–Tribal Elder*

***“When the tide goes out, our table is set.”***

*–Salish Expression*



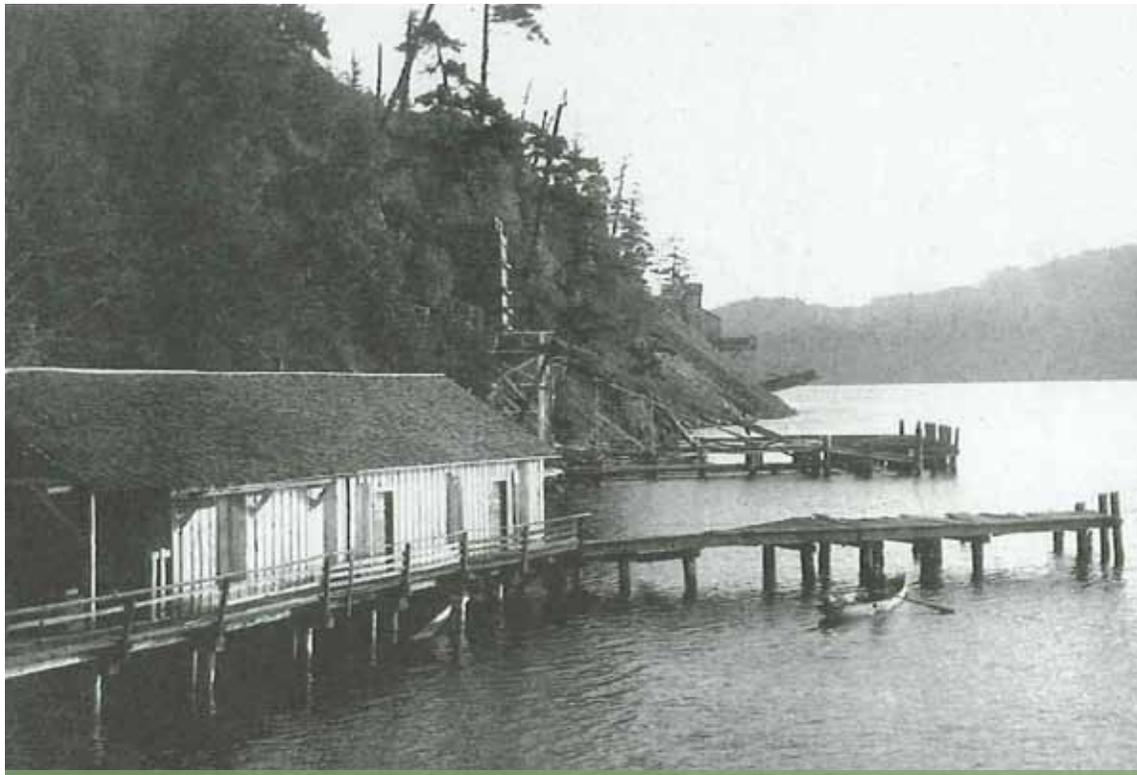


*Historic fruit barn on Orcas Island*

Occupations for settlers included lime kiln, sawmill, and fish trapping jobs. The earliest commercial enterprise on Orcas Island was Langdon's Lime Kiln, constructed in 1869 on the shores of East Sound. Island lime kilns operated from the 1860s to the 1930s. Small hamlets began to form as industries took hold in certain pockets of the islands.

Newhall was built around a sawmill and boatyard at Cascade, the site of today's Rosario Resort. Deer Harbor was settled in the 1850s, and Eastsound began with a homestead at the head of East Sound Bay in the 1850s. West Sound was homesteaded by trappers in the 1860s. The community of Olga began in 1860 and Doe Bay was settled in 1872 by a

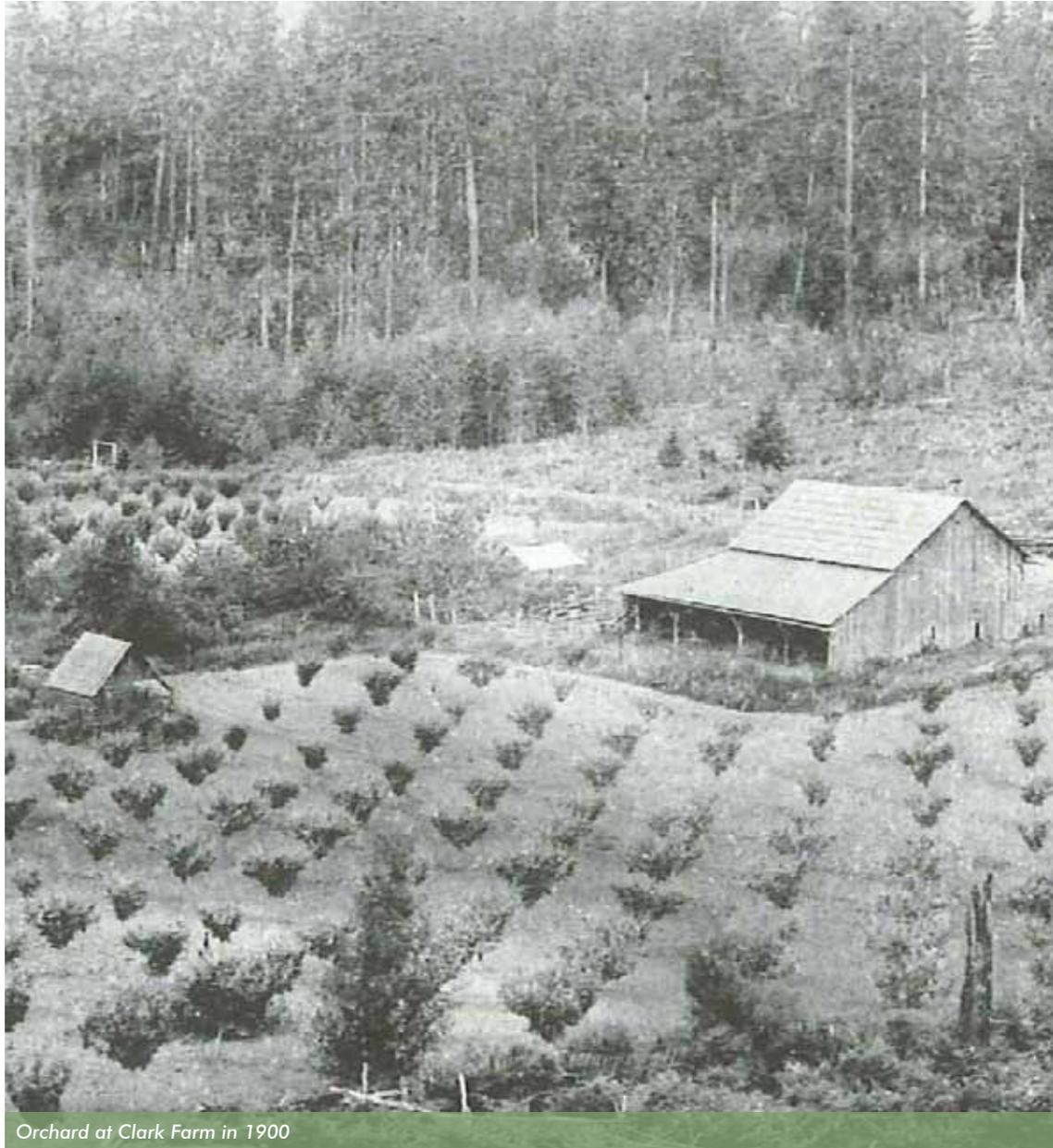
German sailor who had "jumped ship" on the northern coast. Orcas Village was originally known as "Orcas Island" and formed the beginning of a community when a store was opened in 1885. A dock was built to handle boat traffic, and wood and water were provided to steamboats, which were making trips to the island in increasing numbers.



Langdon's Lime Kiln was the first commercial business on Orcas Island.



Jimmy F. Geoghegan picking Barlett pears, 1919



Orchard at Clark Farm in 1900

Agriculture steadily became a burgeoning industry on the island. Sheep roamed the mountains and valleys and early settlers found that fruit trees could be readily grown in the rich soil and mild climate of the island. In 1879, E.V. Von Gohren spurred the largest amount of growth in the fruit industry by planting a nursery that grew 20,000 young fruit trees of different varieties. Through trial and error, it was determined that the Italian prune was best suited to the soil conditions and cool marine climate. Fruit barns soon dotted the island, and three daily steamships transported shipments of prunes, pears, peaches, apricots, plums, apples, cherries, strawberries, and other fruits to market.

Steamships also brought the first tourists, known as "Excursionists," to the island. Visitors found it to be an ideal vacation spot. Resorts were built to attract visitors and accommodate the trending preference for cabin lodgings over tent camping. By 1948 there were around 25 resorts on the island. Visitors came in increasing numbers, attracted to the island's beauty, and spent their time recreating by salmon fishing, hiking, camping, beachcombing, and hunting.

In 1905, Robert Moran began to build Rosario at Cascade Bay. Moran was a prominent Seattle shipbuilder who served as that city's mayor from 1888 to 1890. Following his mayoral service, Moran devoted all his efforts to his shipbuilding business. He was told in 1905 that he had one year to live, and retreated with his wife, Melissa, to Orcas Island. The Moran Mansion was built and became their new home, surrounded at that

time by 7,800 acres of land, which is now the centerpiece of Rosario Resort. Moran outlived his doctors' prediction by another 38 years, and some have speculated that this may have been due to the quality of life he enjoyed on Orcas.

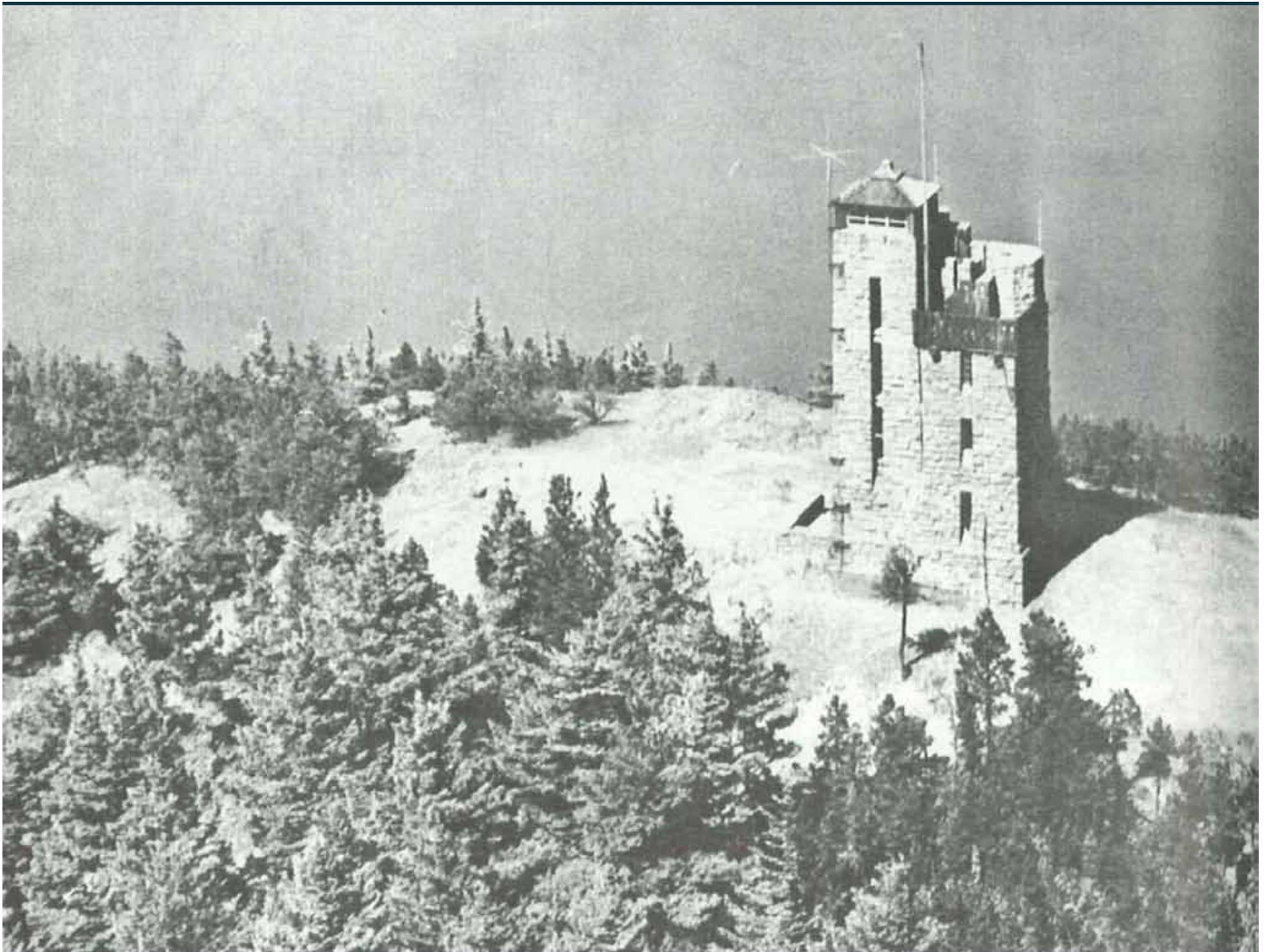
In 1921, the Morans donated more than 2,700 acres around Mount Constitution to the state for a park (now Moran State Park). By 1928, they had added another

1,000-plus acres to their original gift. To date, the park has expanded to include more than 5,200 acres.

In the 1930s, the Civilian Conservation Corps (CCC) set about building many of the trails, roads, and bridges in the park. Their legacy includes 21 buildings, of which perhaps the most outstanding structure is architect Ellsworth Storey's tower atop Mount Constitution. Storey



*The mansion at the Historic Rosario Resort, Robert Moran's estate at the former location of the community of Newhall on Cascade Bay*



*Early photo of the tower built by the Civilian Conservation Corps at the top of Mount Constitution at Moran State Park*



*Historic photo of the entrance to Moran State Park, one of the most popular state parks in Washington*

patterned the building after 12th-century watchtowers of the Caucasus Mountains in southeastern Europe. Construction materials included wrought iron, forged and shaped by CCC blacksmiths, and sandstone blocks from a quarry on the north end of the island. Moran State Park is one of the most popular state parks in Washington, and a wonderful example of Moran's generosity and vision.

The early decades of the 20th century saw significant changes in life on Orcas Island, spurred by improvements in communication, technology, and transportation services. Resorts became the driving

force of the economy after WWII. More people began traveling by automobile and then aboard ferries to the islands. Taking family vacations came into popularity, and there was even a federal program that encouraged people to "See America" at that time.

As technology advanced on the mainland, visitors came to expect the same conveniences on the island. Telephone service was brought to Orcas Island in 1901, but by 1939 there were only 175 subscribers on the entire island, all on party lines. Electrical power was not available until 1938, and not everyone opted for the "convenience" this service provided.



View upon arrival at Friday Harbor, San Juan Island

## Demographics, Island Communities, and the Regional Economy

Conditions related to demographics, communities in the islands, and the regional economy are summarized below. Analysis of these conditions provides an understanding of current geographic, social, and cultural characteristics in the San Juan Islands, as background for the scenic byway plan.

### Demographics

As of 2010 there were just under 16,000 (15,769) people living in San Juan County with a population density of 90.7 people per square mile (Washington State Office of Financial Management). Between 2000 and 2010, the County's population grew by 12.02 percent. The County's 2010 population included 7,662 people on San Juan Island and 5,387 on Orcas Island.

Year 2010 census data showed 7,613 occupied and 5,700 vacant housing units in the county. Overall, there was a 36.5 percent increase in the number of housing units between 2000 and 2010.

The average household size (population/occupied housing units) County-wide was 2.07 people per household.

The 2010 census data also indicated that 90.2 percent of the County's total population reported their race as white, 4.2 percent as Hispanic or Latino, 1.1 percent as Asian, 0.5 percent as American Indian and Alaska Native, 0.3 percent as Black or African American, 0.1 percent as Native Hawaiian or other Pacific Islander, and 0.2 percent as some other race. Another 2.0 percent reported that that they were two or more races.

The total percentage of persons over age 18 in the County was 84.2 percent in 2010. The 2010 census data also indicated that 51.03 percent of the County’s population was female. Age group estimates for 2010 indicate the following.

- 5 years old and under - 3.9 percent
- 18 years old and under - 15.8 percent
- 65 years and older - 23.2 percent

The percentage of people 65 and older was nearly double the statewide population average of 12.1 percent for that age group.

Demographic data from the 2000 census (latest available household data), showed that 52 percent of households were married couples and 7 percent were unmarried female heads of households. The 2000 data also showed that 38 percent of the households did not have children/were not reported as families and 31 percent were individuals living alone. The average family size was 2.65 people.

According to information compiled by the Washington State Employment Security Department for the year 2010, of the estimated total labor force of 7,740 in San Juan County, 590 were unemployed representing a total unemployment rate of 7.6 percent. This compared to an unemployment rate of 9.2 statewide for Washington in 2010. The following leading employment industries exist in San Juan County based on 2008 data from the Washington State Office of Financial Management.

- Accommodations and Food Services 20.7 Percent
- Government 18.6 Percent
- Construction 14.2 Percent
- Wholesale/Retail Trade 12.9 Percent
- Health Care & Social Services 5.8 Percent

## Island Communities

Friday Harbor is the only incorporated town in the islands. Located on San Juan Island, it is the major commercial center of the islands and the county seat of San Juan County. It is also a major portal to the byway, with a busy ferry terminal, a 500-berth marina for private and commercial vessels, and an airport. The 2010 population of the town was 2,162 people. The town encompasses one square mile and has been characterized as a coastal village rich with the history of the San Juan Islands and the Pacific Northwest. Visitors can enjoy a few hours or a day exploring museums, boutiques, galleries, and eateries housed within turn-of-the-century wood-frame buildings. The town hosts the Farmers' Market from April through October every Saturday (and monthly during winter) featuring locally grown vegetables, fruit, flowers, cheese, meat, seafood, baked goods, and more.

Friday Harbor’s major attractions include The Whale Museum, San Juan Historical Museum, “Portals of Welcome” Coast Salish house posts artwork, and the San Juan Community Theatre,



Fresh produce from the San Juan Farmers' Market



Looking out toward the docks from the "Doctor's Office" in Friday Harbor



The historic Orcas Hotel, built in 1904 in Orcas Village

which holds local and touring shows year-round including music, drama, and dance. Friday Harbor also has a medical center, public library, senior center, grocery stores, a laundromat, marine supplies, movie theater, and gas stations.

Orcas Village, the gateway community to Orcas Island, is located at the southeastern corner of West Sound on Orcas Island. It is where Washington State Ferries vessels dock on the island, and consequently all vehicular traffic to and from the island passes through the village. The ferry connection means that most people enter and leave the island through this small village, which has several restaurants, a small grocery store, souvenir shops, and public restrooms. It is home to the historic Orcas Hotel, built in 1904 and listed on the National Register of Historic Places since 1982. A small public dock, private marina, and parking for islanders who commute off-island by ferry are also located here.

Eastsound is the activity hub and population center of Orcas Island. The picturesque village consists of a few lodging establishments, several restaurants, galleries, numerous boutiques, a large downtown grocery store, natural food store, hardware store, pharmacy, airport, and several churches. There is a centrally-located public park, the Village Green, which hosts events including the Farmers' Market. Eastsound's scenic location makes it a popular tourist destination and it is known for its community events, recreation, and tourism. Major attractions include the Orcas Island Historical Museum, Orcas Center, community theater, and The Funhouse.

Deer Harbor is a quiet and predominantly residential hamlet on Orcas Island, also known for its recreation and tourism. People



*The village of Eastsound on Orcas Island*



*The historic strawberry packing building at Olga Corner*

are attracted to activities such as kayaking, whale watching, and fishing. Many people fish for Dungeness crab, rock crab, and shrimp. The Deer Harbor marina provides mooring for boaters attracted to the quaint setting and beautiful scenery of the harbor. The community hub is a collection of buildings which include the Post Office, a restaurant, the fire hall, a multi-purposed meeting room, and some active retail. Deer Harbor is a kempt community that is careful to preserve its remarkable natural resources while maintaining a diverse economic base which enables residents to work, shop, and play.

The community of Olga, named for the wife of the hamlet's first postmaster, is located one-and-a-half miles southeast of Moran State Park on Orcas Island. Nestled along Buck Bay at the southern

end of Olga Road, the community includes various residences, Marine State Park, community buildings, and a public dock at the waterfront. One of the community's signature landmarks, a historic building once used for packing strawberries, is located at Olga Corner, within walking distance from the waterfront. The historic building has been renovated and now houses the Orcas Island Artworks, one of the oldest artist cooperatives in the country, and a café offering Pacific Northwest cuisine.

Doe Bay is a small hamlet on the south-eastern shore of Orcas Island and is home to the historic Doe Bay Resort. Guests can wander the property, relax and take in the view, take a yoga class, get a massage, kayak, eat in the café, and enjoy the soaking tubs and saunas.



*Fish waiting to be canned*



*Women filling cans with diced salmon*

## The Fishing Industry

As touched on previously, fishing has been an important aspect of the history of the islands and was also once a mainstay of the local and regional economy. The First Peoples' fishing activities were sustainable for generations before European-American settlement of the islands. Tribal lore includes knowledge of long-established salmon spawning runs, including areas where the fish skirted the Orcas Island shoreline as vast runs returned to the Fraser and Skagit rivers. The Coast Salish also knew where to find the best clam, mussel, and oyster beds near shore for ready harvest in season.

Fishing technology began to advance in the mid- to late 1800s. Purse seiners and reef netters came into common use, and a fleet of small wooden reef net boats with tall ladder-like lookout towers was a familiar sight in the islands for many years. The commercial fishing industry reached its peak in the late 1800s to early 1900s, when larger fishing fleets were outfitted in the islands and operated regularly in the surrounding waters. Fishing, especially for salmon, supported the local and regional economy and also contributed to growth and development of the islands. Purse seiners, gill-netters, fish traps (eventually outlawed in 1934),

along with reef nets brought abundant salmon catches. Canneries, including large ones at Friday Harbor and Richardson and smaller ones elsewhere in the islands, were built to process the fish. Fish and produce from the islands reached markets in Bellingham, Seattle, and other cities via the "Mosquito Fleet" of steamers that were the principal transportation system for Puget Sound communities during that era.

As a result of intensive overfishing through commercial fleets and fish traps, the fishing industry and associated canning operations steeply declined by the mid-1900s. Today, several species of



*Spring Street, Friday Harbor's historic downtown core*

fish are designated as endangered, threatened, or sensitive (as previously described), and commercial and recreational fishing are tightly controlled by state and federal agencies.

## Regional Economy

Agriculture, logging, fishing, and lime kiln operations were once the main economic drivers for the islands. In the late nineteenth century, the economy boomed with fruit, canned salmon and peas, and lime exports to the mainland. These industries began to collapse as mainland infrastructure improved and it became cheaper to deliver goods overland from the eastern part of the state rather than across waters. It also became much easier to can or freeze and ship salmon from the mainland. The cannery in Friday Harbor was canning peas when it closed in 1966.

However, the islands have long served as a recreational and scenic attraction. By 1971, the Port of Friday Harbor appraised

Front Street to determine market value and development of the waterfront. The primary targets were boaters and ferry travelers, whom the port hoped would extend their stays.

Today, San Juan County's economy is heavily influenced by tourism. In 2009, visitors to the San Juan Islands contributed \$116.5 million to the local economy through purchases related to lodging, food, arts, entertainment, recreation, retail, and transportation. Real Estate and construction activities are also major contributors to the regional economy. This is largely due to the vacation home industry as well as retirees. Second home owners are attracted to the beautiful environment, isolation, and slow-paced island lifestyle.

As the County's primary hub for commercial and public services, Friday Harbor is an important center of economic activity. The leading industries in Friday Harbor include tourism, recreation, hospitality services, retail trade, arts, construction, and government. The most common occupations in Friday Harbor are sales and office (29 percent), management, professional and related (20 percent), and service (19 percent). Approximately 69 percent of workers in Friday Harbor work for companies or organizations, 11 percent work for the government, and 13 percent are self-employed.

For more information about recreation activities and destinations, refer to Section 4—Assessment of Intrinsic Qualities, which describes the byway's unique qualities and visitor destinations. Refer to Sections 5, 7, and 10 for additional information about visitation, tourism, and their influences on the economy.



*Sailing off the coast of San Juan Island*

## Multi-modal Transportation

Transportation to, from, and on the islands is an important aspect of the scenic byway experience. The way transportation is promoted and provided to scenic byway travelers is also an important tool in managing visitation and minimizing transportation-related impacts. In addition to the brief summary below, refer to Section 7 for information about multi-modal transportation to, from, and on the islands.

### Transportation History

#### *Marine Transportation*

Some of the earliest forms of transportation included canoes crafted from red cedar trees, used by the Coast Salish for thousands of years. Coast Salish peoples used canoes for travel, fishing, and carrying passengers or food. Early non-native settlers used canoes until sailing sloops, and then steamboats became available. Competition was fierce among steamboat operators and freight rates and ticket prices rose and fell unpredictably. Eventually, in 1923,

Harry W. Crosby organized a ferry run between Anacortes and Sidney, BC as an experiment. It was able to carry 12 automobiles. The Puget Sound Navigation Company—the Black Ball Line on Puget Sound—eventually took over the ferry service, until the State of Washington assumed control in 1951.

#### *Land Transportation*

There were very few roads when the first non-native settlers homesteaded on the islands in the mid- to late 1800s. Rough cart tracks and logging skid roads were built, but travel was mostly by foot or horse for many years (or by boat between shoreside villages). During the last decades of the 19th century, more roads began to appear. One of the earliest was the road that connected the two encampments of the Pig War era on San Juan Island (American Camp and English Camp). Additional roads were built to meet the needs of the growing agricultural industry, providing an efficient method of transporting goods from inland farms to steamships waiting at the dock. On Orcas Island, the “Horseshoe Highway” extended from Orcas Village to Eastsound and Olga. For additional information on

transportation history refer to discussion in Sections 4 and 7.

### Transportation Today

The remote location and accessibility of the San Juan Islands is part of the area’s attraction as a premier vacation and second home destination, but this also means there is a limited range of transportation options to access the islands: ferry, boat, float plane or ground plane.

The San Juan Islands Scenic Byway includes Washington’s first designated scenic marine route. In fact, most visitors travel to the islands by ferry on the Washington State Ferries system.

Visitors are encouraged to leave their vehicles at the Anacortes Ferry Terminal because of concerns related to traffic congestion and related environmental impacts. The rural roads on the islands are not designed to accommodate heavy traffic volumes, and there is a strong desire to keep road infrastructure to a minimum, preserving the scenic character of the islands.

Rental cars, smart cars (electric, minis, etc.), scooters, mopeds, bicycles and



Sea planes regularly transport people to and from the islands.

other vehicles are available for rent upon arrival to the islands (primarily in Friday Harbor on San Juan Island). Shuttles (seasonal) and taxi services also provide access around the islands. Many of the towns and villages on the islands are highly walkable, with sidewalks, paths, and trails. There are also parks and recreation areas with developed trail systems. The islands are included within the Cascadia Marine Trail system, which offers travel route information, safety tips, and campground locations for travelers using small wind- or human-powered, beachable watercraft.



Bicycling towards Cattle Point, San Juan Island

Kayaking, canoeing, small power boating, and sailing are popular means of recreation and transportation throughout the islands.

The high percentage per capita of pilots and plane owners in the islands is significant and one of many influences on the characteristics of island-living found in the San Juans.

Refer to Section 7 for a more extensive description of existing transportation options, as well as planned and recommended improvements.

## Review of Existing Plans and Policies

The San Juan Islands Scenic Byway Corridor Management Plan (CMP) has built upon the efforts and visions of the communities, agencies, and non-profit organizations of the San Juan Islands, who have worked together to create previous plans. The CMP has been shaped by a number of these plans. Dovetailing planning efforts like this will promote coordination among the various organizations. The following plans have especially influenced the content and tone of the CMP.

### ***Transportation Element of the San Juan County Comprehensive Plan, 2006 and Comprehensive Plan, 1998***

As stated in the document, the San Juan County Comprehensive Plan was produced by and for its citizens. It integrates their ideas, concerns, and expressions of what the County should look like in the future. These expressions have guided the mission, vision, and overall tone of the CMP. The Comprehensive Plan, together with its supporting documents and the ordinance by which it is adopted, is the official policy statement of the County. The plan provides a long-range framework to guide citizens, County government, and private agencies and service providers in their decisions about growth, land uses, conservation of natural resources, and major capital facility expenditures. The goals and policies in this plan direct future decisions on land use actions, ordinance amendments, capital expenditures, procedures and programs. The Transportation Element specifically guides policies and public funding decisions related to transportation

### WE THE PEOPLE..

***of San Juan County recognize that these rural islands are an extraordinary treasure of natural beauty and abundance, and that independence, privacy, and personal freedom are values prized by islanders. Being a diverse people bound together by these shared values, we declare our commitment to work toward our vision for the San Juan Islands (2020).***

*Adapted from the Declaration of Vision and Commitment to the Future of San Juan County.*

*For the full vision statement refer to the Appendix to this plan.*

improvement projects in the county. The County will be updating the transportation element in 2011/2012.

### ***San Juan County Non-motorized Transportation Plan, 2005 & San Juan Island Trails Plan, 2006***

The San Juan County Non-motorized Transportation Plan addresses a key goal of this scenic byway CMP. Throughout the planning process, the byway partnership committee and public expressed the desire to have people visit the islands without their cars. Through this goal, alternative methods of

transportation would be promoted for traveling throughout the islands via public transportation, rideshare, rented transportation, bicycling, or on foot. The Non-motorized Transportation Plan is incorporated into the Transportation Element of the San Juan County Comprehensive Plan and focuses on bicycling and walking guidelines and identifies proposed projects throughout the county. The purpose of the plan was to take action on state and county directives that address non-motorized transportation requirements and to respond to expressed public needs. The mechanism for project development included public involvement, volunteer work, and a commitment by the County to enhance the possibility for alternative means of transportation.

The San Juan Island Trails Plan identifies trail projects, specifically on San Juan Island. The plan was created for the purpose of fostering coordination between public and private groups and individuals involved in the creation and

maintenance of a network of non-motorized trails that connect key resources and destinations on the island. It reflects input from island residents and partnering agencies. It is hoped that this document will aid the Trails Committee in seeking funding for trails projects on the island.

### ***San Juan County Parks, Trails, and Natural Areas Plan, 2010***

Preservation and enhancement of open space and trails are important considerations in the development of this scenic byway plan. Over the course of one year, San Juan County worked with The Trust for Public Land to assess community needs, engage the public, and craft a plan that strengthens public recreational facilities and charts a clear future for San Juan County Parks, Land Bank, and Public Works, which are the three county departments charged with overseeing County parks, trails, facilities, and natural areas. The San Juan County Parks, Trails



*A San Juan County rural road*



*Road to Mount Constitution*

and Natural Areas Plan includes a 20-year community vision for public recreational facilities of San Juan County, as well as a six-year action plan, which have both been referenced and incorporated into this CMP.

### ***San Juan County Coordinated Human Services Transportation Plan, July 2010***

The purpose of this plan was to create a locally-developed coordinated assessment and plan for San Juan County that will improve transportation services for individuals with lower incomes, seniors, and persons with disabilities. Mobility needs of transportation-disadvantaged persons are varied, and each of our major ferry-served islands has its own unique challenges and strategies in place. Recommendations of this plan as relevant to the scenic byway have been incorporated into this CMP.

### ***Town of Friday Harbor Comprehensive Plan, 2002***

The 2002 Comprehensive Plan was developed in accordance with Section 36.70A.070 of the Growth Management Act. It represents Friday Harbor's policy plan for growth and development over the next 20 years.

### ***Eastsound Subarea Plan (Draft), April 2007***

The Eastsound Subarea Plan is being reviewed for consistency with the Comprehensive Plan and Unified Development Code. By adopting this plan, the County established as its policy the maintenance of a subarea plan to provide land use and development goals, policies and regulations specifically for the Eastsound planning area. Eastsound is the largest unincorporated community in the County. It is the geographic center and commercial and cultural center of the Orcas Island community.



Passenger boat landing at Deer Harbor

### ***Deer Harbor Hamlet Plan, June 2007***

The Deer Harbor Hamlet Plan establishes San Juan County's policy for the future development of the Deer Harbor Hamlet on Orcas Island. A boundary for Deer Harbor Hamlet was first established in the County's 1979 Comprehensive Plan and subsequently revised during more recent activity center planning to meet the goals and requirements of the Growth Management Act (GMA).

### ***Orcas Village Plan, October 2008***

Orcas Village is the gateway to Orcas Island. The Orcas Village Plan, as adopted in 2008, consists of one document that details the goals and principles guiding the development of the village, and a second document that details the development regulations to implement these goals and policies that are



Indian Island Marine Health Observatory in East Sound

incorporated into the San Juan County Code. The Orcas Village plan document is a subsection of the San Juan County Comprehensive Plan and is adopted by reference into Element B, Section 2, Land Use 2.6.C.

### ***San Juan Island National Historical Park General Management Plan, October 2008***

A proposed new, year-round visitor center at American Camp and the expansion of the English Camp boundary are among the highlights included in San Juan Island National Historical Park's General Management Plan and Environmental Impact Statement. The document also identifies trails, programs, and natural and cultural resource projects that will unite the park's historical and natural themes.

### ***Land Bank Habitat Conservation Plan, 2008-2014***

This plan builds on a series of efforts conducted by the County since the late 1980s. Its primary goal is to help the County focus on ecologically-based land protection efforts for the next six years of the Land Bank program.

### ***San Juan County Marine Stewardship Area Plan, July 2007***

The Marine Stewardship Area Plan aims to protect and restore the entire marine system in the San Juans. Established in January 2004, the Marine Stewardship Area set a course for the Marine Resources Committee (MRC) to identify the key action steps toward a healthier and more sustainable island marine ecosystem for the natural resources and the benefit of the people who live, work and recreate there. To accomplish this, the MRC brought in partners from the Northwest Straits Initiative, The Nature Conservancy and SeaDoc Society to develop a planning process that would identify key strategic actions incorporating scientific knowledge and human-based priorities, such as our desires to fish and to paddle. (goals=[www.sjcmrc.org/programs/msa/plan.htm](http://www.sjcmrc.org/programs/msa/plan.htm))

The San Juan County Marine Monitoring Network, is supporting program composed of five, placed-based community marine monitoring programs on four islands. The Marine Monitoring Network is implementing the Marine Stewardship Area Plan at the grassroots level. The Network, a collaboration of Kwiaht (Center for the Historical Ecology of the Salish Sea) and Washington State University Beach Watchers, conducts public education events on the beach at five field sites, including a location overlooking Indian Island (Eastsound vicinity) on Orcas Island.



View of the historic Rosario Resort from the water

### ***San Juan County Watershed Management Action Plan, June 2000***

The San Juan County Watershed Management Action Plan differs from other watershed plans because it addresses watershed issues County-wide, and then uses priority watersheds to focus on specific examples of non-point problems and recommended solutions. Some issues, such as on-site septic design, maintenance, and repair, are County-wide concerns. Other issues, such as agricultural practices, are concentrated in a few watersheds.

### ***San Juan County Water Resource Management Plan WRIA2, October 2004***

This plan follows in the footsteps of the San Juan County Watershed Management Action Plan, which was developed by the committee and approved in 2000. These two plans are basically volumes 1 and 2 of a management strategy for water resources in the County. This plan addresses aquifer and surface water quantity, water quality, water rights, and capacity to serve projected growth estimates, and sets up a program for long-term resource management.

### ***Rosario Master Plan, 2007***

The purpose of this Resort Master Plan is to provide direction to the Resort as it is restored, rebuilt, and expanded to fulfill its potential. Emphasis of this plan is to ensure that guest convenience is maximized and operations are efficient while the natural amenities are protected. This plan is also intended to comply with San Juan County's requirements. As implemented by the Unified Development Code (UDC), the San Juan County Comprehensive Plan accommodates the unique land use needs of self-contained resorts, including planning flexibility, with the special Master Planned Resort (MPR) land use designation.