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Forestland Owners:  
The USDA Forest Service

Glen Holt, RREA forester



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the mainland; and a host of other bays, inlets, glaciers, rivers and millions of acres of wild and primitive land in, around and through it.

The Tongass National Forest is the location of 32 towns and villages. These communities are enabled by a large assortment of natural resources including sustainable supplies of timber, the production of approximately 64 million salmon from its watersheds, and a growing tourism industry.

Salmon from the Tongass support 1 in 10 jobs in Southeast Alaska. Sport fishing in the Tongass is described as “phenomenal” and there are lodges and guide services that cater to sport fishermen helping to support the local economy.

The Tongass National Forest itself offers 142 rustic reservable cabins, 210 campsites within 13 campgrounds, 19 wilderness areas, two national monuments, and 450-miles of hiking trails there. Cabins, interpretive sites and many miles of maintained trails are in the Tongass

There are more brown bears on one island (Admiralty) than the entire Lower 48 combined.

National Forest activities within the Tongass include: interpretive trails, fishing derby's, Junior Ranger Programs, Family Field Guides, kayaking, air charters, sight-seeing, ferry systems, boat rentals, fishing charters, bear viewing, tide pools, glacier viewing, bed and breakfasts (B&B), bird watching, cave tours, boardwalks, stream fishing, wildlife observation sites, and a road system built by the timber industry during its hay-day for exploring by car on Prince of Wales, Island.

Learn more at [www.fs.usda.gov/tongass](http://www.fs.usda.gov/tongass)

• Forest Supervisor's Office in Ketchikan: 907-225-3101

- Admiralty National Monument Juneau Ranger District in Juneau: 907-586-8800
- Craig Ranger District on Prince of Wales Island in Craig: 907-826-3271
- Orne Bay Ranger District on Prince of Wales Island: 907-828-3304
- Hoonah Ranger District: 907-945-3631
- Ketchikan Misty Fjords Ranger District in Ketchikan: 907-225-2148
- Petersburg Ranger District in Petersburg: 907-772-3871
- Sitka Ranger District in Sitka: 907-747-6671
- Wrangell Ranger District in Wrangell: 907-874-2323
- Yakutat Ranger District in Yakutat: 907-784-3359

## Public Forest Management

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### A new Tongass National Forest Southeast Alaska Sustainability Strategy

Adapted from USDA Press Release No. 0157.21

The U.S. Department of Agriculture (USDA) announces a new Southeast Alaska Sustainability Strategy to help support a diverse economy, enhance community resilience and conserve natural resources. Within this strategy, the USDA will consult with tribes and Alaska Native corporations, and engage partners and communities in a collaborative process to invest approximately \$25 million in financial and technical resources in sustainable opportunities for economic growth and community well-being and identify priorities for future investments.

A key part of this strategy will end large-scale old-growth timber sales in the Tongass National Forest and instead focus management resources to support forest restoration, recreation, climate resilience, wildlife habitat and watershed improvement. Small and micro old-growth timber will still be offered for community consumption and cultural uses such as totem poles, canoes and tribal artisan use.

The strategy proposes to restore the 2001 Roadless Rule protections on the Tongass National Forest,

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## Tree Health and Fertilization

Glen Holt, RREA forester

Alaska's forest health is declining due to environmental stress and is affecting middle- to older-aged trees in the forest and especially in long-established neighborhoods. Stress factors include warming and drying trends, which lead to declining vigor.

Yard trees are often planted or retained on highly disturbed sites where soil fertility is diminished due to land clearing, house building and access development. Middle- to old-aged forests and trees in Alaska are naturally exhibiting slowing growth;

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- Low moisture availability (when applied during a period of sufficient moisture in order to increase root surface)
- Soil compaction (enhanced root development leads to reduced compaction)
- Recovery from physical damage
- Ability to compete with grass accumulations and other vegetation
- Insect and disease problems

### Get your soil tested

Turn in a sample of your soil to your local University of Alaska Fairbanks Cooperative Extension

agent. They will have it analyzed and then advise you on how to remediate your soil to best advantage.

### Limit fertilizing to the proper season

Over fertilizing or at the wrong time of the year can be harmful. In Alaska, the best time to fertilize trees is in the spring after the snow is gone and the leaves are fully developed.

Re-stimulating a tree with fertilizer after the end of July can result in severe cold weather injury to the tree.

For application rates reflecting the current and ongoing knowledge of tree fertilization look at the UAF Cooperative Extension Service publication titled "Tree Health and Fertilization: FWM-00119," in which much of the material here was found.

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## The Project Learning Tree (PLT) Program in Alaska

Project Learning Tree, better known in the education community as PLT, has been around a long time in Alaska and the United States and provided many teachers and educators with materials to deliver forestry and environmental education activities and curriculum.

The Pacific yew (*Taxus brevifolia*) also called western yew and mountain mahogany, is a shrubby to medium-small coniferous evergreen tree usually less than 49 feet tall and less than 20 inches in diameter. They are extremely slow growing and hard to age due to rot in older ages.

They are found as far north as southern Prince of Wales Island in southern Southeast Alaska. Pacific yew grows as a tree beneath a closed forest canopy of overtopping late successional stage forests beneath hemlocks, Sitka spruce and cedars. In Alaska, this shade-tolerant species often grows short and stunted with multiple tops.

Pacific yew has thin scaly brown bark covering off-white sapwood around a darker heartwood that varies in color from brown to a purplish or deep red.

The needles are evergreen, lanceolate shaped, dark green, just over an inch long and less than 0.1 inches wide. The needles appear to align in two rows.

The seed cones are highly modified, each containing a single seed from 0.1 to nearly 0.3 inches

Pacific yew needles are soft to the touch and lay in two flat rows.

long, partly surrounded by a modified scale that develops into a bright red berry-like structure called an aril, which itself is from 0.3 - 0.6 inches long and wide and open at the end. Arils of the Pacific yew mature 6–9 months after pollination. Male cones of this generally dioecious species are globe shaped, 0.10 – 0.24



Ted Sandhofer, Petersburg district ranger, uses a beating sheet to help the Forest Health Protection team survey and collect hemlock defoliators. The sheet is placed

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## The Forest as Habitat: Southeast Rainforests

Glen Holt, RREA forester

Basic wildlife habitat requirements include: food (adequate to every seasonal need), cover (nesting cover may be different than winter protective cover), water and living space (variable by gender and species).

However, black bear in spring when deer fawns are born can become a significant predator for weeks before the fawns grow large enough to get away.

The forest habitat in Southeast Alaska is identified as the Northern Pacific Temperate Rainforest Ecoregion and is characterized by high amounts of rainfall and moderate summer and winter temperatures. Its landscape consists of mainland surrounded by islands and fjords near the ocean. It is often dominated by steep mountainous terrain with manus tA(e a)9 (r EMC

Southeast Alaska forests are covered with Sitka spruce, western and mountain hemlock, red and yellow cedar, black cottonwood, alder and shore pine.

Habitat requirements can be specific to a wildlife species. Some factors might overlap and the species then would be in competition for those resources like seasonal food, or nesting cover, or living space.

Sitka black-tailed deer and black bear live in the forests of Southeast Alaska and may occupy much of the same area, but their specific requirements for food, cover and living space are not similar and so they don't directly compete for most of those basics.



Clear cuts grow back fast to closed canopy stands with very little food habitat potential until light is let in to the stand by thinning or blow-down.

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in the Tongass National Forest of Southeast Alaska and doing so they regenerate abundant food for deer, bear and other wildlife. After 20 years or so, the regenerating trees have grown back so profusely they shade out all other plants in the understory. Almost no wildlife food grows there after 20 or more years from clear cutting, until the stand opens again allowing light to regenerate plants.

It could take 50 years or more for un-thinned stands to begin to regrow understory plants, shrubs and forbs that wildlife need for food.

Wildlife habitat supports the culture of Southeast Alaska with a variety of personal use subsistence resources. Forest management is challenged by weighing forest land use considerations with what is vitally important to people that still live on, in and with the landscape in Southeast Alaska's Northern Pacific temperate rain forest.

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