



# TONGASS TINY HOME

BIG BENEFITS.  
SMALL FOOTPRINT.

## OUR COMMUNITY: AFFORDABLE HOUSING AND VOCATIONAL TRAINING



The Tongass Tiny home is being built by a local high school construction class. While students are gaining valuable hands-on experience in local wood construction, labor costs are eliminated, allowing the final product to be used as an affordable rental unit. Affordable housing is a challenge for many rural communities in Alaska. While this model isn't for everyone, it is one potential solution. Tiny homes may provide an affordable option for home seekers or homeowners looking to add rental units to their property.

## ENVIRONMENTAL RESPONSIBILITY: REDUCING OUR FOOTPRINT



This project demonstrates how homes can be designed and built to meet our climate needs, reduce material use, maximize energy efficiency and in turn, reduce the overall carbon footprint of home construction. Local wood and local young-growth lumber, a more sustainable regional option, is being used whenever possible.

## WHAT IS YOUNG GROWTH?

Young growth is the secondary succession of trees that follows after the harvest of primary forest. Logging practices in the '60s and '70s resulted in large tracts of homogenous, even-aged stands that pose threats to ecological function and wildlife. Restorative thinning projects can improve habitat, create jobs, enhance subsistence opportunities and generate lumber for commercial opportunities.



## OUR ECONOMY: LOCAL MATERIALS, LOCAL JOBS

This project is exploring the economic potential of the tiny home model while developing a local workforce through vocational training. Local materials and local woods are used in construction whenever possible. The project is strengthening relationships between Alaskan builders and Alaskan lumber suppliers, supporting intra-region commerce. We are learning and documenting best use practices of local woods and paving the way for new businesses in value-added local wood processing across our region.

## CELEBRATING PARTNERSHIP

The Tongass Tiny Home Project is a truly collaborative effort. Our partners include: National Forest Foundation Community Capacity and Land Stewardship Program, the US Forest Service, Sitka High School, Alaska Marine Lines-Lynden Transfer, Tumbleweed Tiny Homes, Spenards Building Supply, Portland Alternative Dwelling-Shelter Wise LLC, UAS Sitka, Sustainable Southeast Partnership, Sitka Conservation Society.



Sitka High students build the Tongass Tiny Home during construction class using locally sourced wood.



# Building the Tongass Tiny Home

**Big Benefits. Small Footprint.**

The Tongass Tiny Home is a local project from start to finish: built by students in Sitka High School's construction class using local wood from the Tongass National Forest. The result? A beautiful tiny home that uniquely reflects and benefits the community and environment of Sitka.

## Great for Our Community

The Tongass Tiny Home is being skillfully built by students in an advanced construction class offered through the Sitka High School vocational education program. Through building the Tiny Home, students gain hands-on construction experience, develop technical skills relevant to local industries, and practice professional performance standards. This class is a unique opportunity for students to join the local workforce with experience already under their (tool) belts.

This project also helps the community of Sitka explore the economic potential of the tiny home model. Affordable housing is a challenge for many rural Alaskan communities, and a tiny home may be a viable alternative for certain home seekers or homeowners. While not right for everyone, tiny homes may be the perfect fit for Alaskans seeking to downsize, to reduce their energy bill, to avoid the need for a mortgage or to lower their rental payments. Tiny homes also provide an avenue for communities to thoughtfully increase housing density and add affordable rental units to the market.

## Great for the Economy

Whenever possible, we've purchased local materials to build the Tongass Tiny Home. Buying locally manufactured wood products crafted from sustainably sourced Tongass timber provides jobs and supports local businesses across Southeast Alaska. By purchasing local wood, this project is strengthening relationships between Alaskan builders and Alaskan lumber suppliers to facilitate intra-region commerce.

By buying local, we're also keeping more money circulating in the Southeast economy, rather than sending our dollars out of state. Using local wood means more money in the pockets of your neighbors, more money invested in local schools and infrastructure, and more money spent at local businesses.



## Great for the Environment

The Tongass Tiny Home demonstrates how we can design and build our homes to meet our climate needs, reduce material use, maximize energy efficiency, and reduce the overall carbon footprint of home construction. Buying locally-produced wood means less fuel used and fewer greenhouse gas emissions generated from shipping than importing timber from other states and countries.

Local young-growth lumber, a more sustainable regional wood option, is incorporated as much as possible into the Tongass Tiny Home construction. Young growth timber, also known as second growth, comes from the trees that grow back after clearcuts. The Tongass National Forest is in the midst of a transition from the extractive practice of industrial scale old growth timber clear cutting to a sustainable future of young growth timber management.

The transition will ensure that our remaining stands of old growth forest continue to provide wildlife habitat, sequester carbon, support subsistence practices and traditions, and harbor prolific runs of wild salmon.



# The Raw Material

A sustainable & marketable young growth timber resource  
Tongass National Forest, Southeast Alaska

**“ Mills and entrepreneurs have successfully experimented with young growth forest products over the last few years since the transition was announced.**

They have found that there are applications for young growth wood products from the Tongass and that local utilization and manufacturing can be a part of our regional economy. Red Alder is one of the Tongass Young Growth products that has a lot of potential for value-added applications.”

**Beth Pendleton**  
Regional Forester, Alaska Region-Forest Service

*Photo by Bethany Goodrich*



# The Harvesters

Southeast Alaskan Lumber Mills

The Tongass Tiny Home selectively uses local old-growth lumber while focusing on investments in young-growth wood. By investing in the emerging young-growth market, the tiny home project is supporting the development of a more sustainable timber market while cultivating better options for local builders.

It's amazing the innovation that can be found right here in Southeast Alaska!

Wes Tyler, one of the Tiny Home suppliers explains his operation:

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**We're fundamentally a custom cut and processing mill. We've done everything from small boards for picture frames all the way up to timber frames for buildings.**

**Wes Tyler**  
Icy Straits Lumber & Milling  
Hoonah

*Photo by Alex Crook*



# The Builders

Sitka School District

The Tongass Tiny Home project is the first advanced construction class offered by the Sitka School District in ten years. This program is an investment in our youth and Sitka's future. It provides students with the opportunity to build valuable skill-sets, while exploring potential pathways to success in the local economy.

**The professional standards covered by the Tiny Home curriculum include the following:**

- Construction safety standards
- Proper use and maintenance of equipment
- Application of construction skills, methods & techniques
- Construction planning & design in line with industry standards
- Mathematics as applied in construction
- Fluency in building regulations
- Familiarity with electric & plumbing systems

The opportunity to work on the Tongass Tiny Home equips students with skills and experience which they are already using in other projects. Many students express interest in pursuing further work and training in construction through additional classes at Sitka High School, internships, or other classes available in the region.

*Photo by Sarah O'Leary*



# Thank You

Thank you to the many supporters and collaborators who made the Tongass Tiny Home initiative possible: The Sitka School District, Mike Vieira, Randy Hughey, the National Forest Foundation, the Nature Conservancy, USDA Forest Service, Meredith Condon, Island Enterprises Inc., Sitka Electric, Gordon Hall Plumbing, Schmolck Mechanical, & Tumbleweed Tiny House Company.

**The Tongass Tiny Home team has a lot to celebrate!** This project has resulted in 1 Tongass tiny home, 6 semesters' of students trained in advanced construction, and over \$62,000 in funds leveraged for Sitka School District. It has also formed enduring relationships between community partners.

**And we're not done yet.**

Thanks to the vision of Sitka's current and former vocational educators, the Career & Technical Education Center is an incredible community resource. This center gives students opportunities to learn technical skills including computer-aided design, 3D printing, casting, machinery, construction and more. The sale of the Tongass Tiny Home will both provide an affordable housing solution for someone in Southeast Alaska and allow us to reinvest in this excellent workforce development program. **Do you have ideas for future projects? Let us know!**