

What Makes Volcano's Native Forest so Special?

In Hawaii, Volcano is considered nearly the only community sited entirely within native forest. The song of native birds greets us in the morning.

And although the 'ōhi'a tree (right) and varieties of hāpu'u (tree fern) are dominant, the forest is a family of interdependent species. The lehua flower of the 'ōhi'a (above) is the main food for 'apapane and many other "endemic" birds of Hawai'i. (Endemics live in only one area of the world.)



© jackjeffreypphoto.com

"A Forest Corridor"

Volcano borders Hawai'i Volcanoes National Park, a UN International Biosphere Reserve and International World Heritage Site, and State Forest Reserves. It is highly sensitive, ecologically. So Volcano's forest also serves as a **critical connection** between these unique protected areas.

As homes are built on more and more of Volcano's lots, "forest holes" result. This breaks the continuity of critical habitat. Bird populations become genetically isolated and at greater risk.

Volcano's "Golf Course Subdivision" is already seriously degraded (dry-mesic 'ōhi'a woodland).

The scarlet, talented songster 'apapane (left), the 'elepaio, 'amakihi, and 'ōma'ō are some of Volcano's endemic

© jackjeffreypphoto.com

birds (defined above). About 30 endangered birds live in the State of Hawai'i.

Help for Forest-Friendly Building & Forest Restoration



Nēnē

You're not Alone:

Resource List for Building in the Forest

The Resource List includes businesses who assist with "forest-friendly" land preparation; local nurseries; native forest landscapers; information on native and invasive species; etc. It's available with this brochure and on the VCA website.

You can also call upon the VCA to:

- Arrange visits to "forest friendly" houses;
- Help you consider "forest friendly" methods and contacts for building on your land;
- Have someone walk your land with you to identify native species & aggressive weeds.

Volcano Community Association

P.O. Box 600
Volcano, Hawaii 96785

(808) 985-7014, 985-7041, or 967-8095

email: VCA@volcanocommunity.org

website: www.volcanocommunity.org

Photos & graphic art donated by: Ken Goodrich (hawaii.photoretreat.com) & Jack Jeffrey (jackjeffreypphoto.com)

Writing & layout donated by: K Johnson, dba Community Environmental Education (tempk@hawaii.rr.com)

Recycled and recyclable; using soy-based ink. Jan 2009

BUILDING in the FOREST



A guide to building in Volcano, Hawai'i

Produced by the Volcano Community Association

Why save your Native Forest?



© hawaiiphotoretreat.com

Common Misunderstandings

Some lot owners believe that completely clearing and grading their property offers attractive benefits, such as apparent cost savings, flexible landscaping, or ease of using standard house designs.

Some Benefits of Saving Your Forest:

- **Visual and noise buffers** are provided free, and increase cherished privacy.
- **Natural landscaping** provided by native forest is both valuable and appealing.
- **Essential habitat is saved** for attractive and useful native birds, trees and other plants.
- **Aggressive “invasive species”** spread quickly on cleared land, and are not introduced if dozing and clearing are limited, saving you time and money later.
- **Serious flooding problems** can be avoided for yourself and your neighbors, which is often created by improper or excessive grading.



© hawaiiphotoretreat.com

Forest-Friendly Home “In-Progress”



© hawaiiphotoretreat.com

Here’s what you get from clear-cutting

Suggestions for Preparing your Lot

- **Preserve existing native forest.** Clear as little land as possible, never clearing the lot “pin-to-pin.” (Mature trees make the lot appear larger.)
- **Plan your house to fit in harmony with your existing intact forest.** Your house may go well in already-clear spaces; preserve areas with the healthiest forest. Advisors can walk your land with you as a first step (call VCA).
- **“Hand-clear”** as much as possible. See the Resource List for ideas and a few local hand-clearing professionals.
- **Always have someone present to supervise** when clearing on your lot... heartbreaking misunderstandings and unwanted clearing can occur.
- **If machine-clearing or grading parts of your lot,** use small excavators, front-end loaders, or small, maneuverable dozers (see Resource List).
- **Stay warm and dry:** clearing a bit on the south side & selective thinning on other sides lets in enough warmth and light to limit household mold.
- **Remove existing “invasive species” during land preparation** (such as myrica faya, strawberry guava, tibouchina, himalayan raspberry, and ginger).

Landscape “with” the Forest

- **“Design with Nature.”** You can use your existing native forest to guide both house placement and additional landscaping.
- **Much “native forest” is heavily degraded.** Restoring your native forest, guided by your personal aesthetic sense, is a win-win plan.
- **If landscaping, choose native species appropriate** to Volcano’s climate so your plantings will thrive.
- **Beware of invasive species.** Nursery plants can carry hitchhikers like coqui frogs, fire ants, and stinging-nettle caterpillars. **Check all plants!**
- **Remove aggressive invasive plants.** VCA can help with plant identification and methods.
- **Prevent standing water.** Mosquitoes breed in containers of standing water, and the avian malaria they carry is deadly to native birds. Turn over empty pots, buckets, & tires. Stock ornamental ponds with fish like “comet goldfish.”
- **Reduce “light-pollution.”** Keep native seabirds safe by limiting exterior lighting, which disorients birds as they overfly forest at night to feed their young. Observatories on Mauna Kea are also benefited. All outdoor lights should face the ground (by law), not outward or upward.
- **Volcano can be cool and wet** – ideal conditions for mold growth. Keep interiors dry with south-facing windows, skylights & through ensuring good indoor air circulation. Build well off the ground or on proper concrete slabs (with insulation).

Native Forest is Fragile

The ‘ōhi’a tree – heart of Volcano’s forest – can take decades to regrow. Hāpu’u are also very slow-growing. And restoring the full complex understory means vigilantly removing aggressive invasives.