

## COMMERCIAL FORESTRY

### TRENDS IN SECURING AND MILLING KOA

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**Paper Title:** Koa harvests and markets: past and future

My own personal experience with working with and harvesting koa go back to 1982, when I first used koa for furniture and cabinetmaking. Even back in the early 1980's koa lumber that was ready to work was difficult for local woodworkers to obtain. Many of us took it upon ourselves to harvest our own koa along with many other locally grown trees. This is how things have unfolded for the last 35 years.



**Figure 1:** Large logs from dead trees are brought to the mill. These logs may resist rot for many years.

Koa timber has for the most part been harvested on private land for the last few decades with a few small sales on state land under control of the Department of Hawaiian Homelands. The large majority of all trees harvested have come from private ranches at upper elevations, from 4,000' to as high as 6,500'. Salvage logging would be the best way to describe how any harvesting is done. Almost without exception all the koa is harvested from old growth forests that had been converted to pasture slowly but surely over the last 150 years by simply letting the cattle graze and roam at will. Most of these forests are missing complete generations of young, healthy trees. The grazing cattle have eliminated any hope of seedlings making any headway.



**Figure 2: Lumber of different dimensions is sold mainly to furniture manufacturers. Only heartwood is sold currently; there is little market for sapwood.**

The trees I have harvested and brought to the mill have been from dead, down, and dying trees. Occasionally healthy trees are harvested if the landowner sees fit. Almost all the trees have been old growth, which to me means they are of an age of 75 years to perhaps as old as 400 years. I have harvested and sawn younger koa trees in the range of 25-45 years old, and I have helped with

scientific studies to try to get a better idea of what these young trees might provide to woodworkers of the future.

Having harvested, sawn, edged, trimmed, and graded hundreds of thousands of board feet of koa I have come to a very straightforward conclusion: lumber from old growth trees is far superior to that from younger trees. This is not some earth-shaking news to any woodworker here in the Hawaiian Islands, and that does not mean that there is not value to be had in those young trees. Thirty-five years ago no one ever thought of making use of the smaller branches or stumps of the harvested trees as we do now. Thirty-five years ago truck loads upon truckloads of short lengths of koa lumber were bulldozed into slash piles because they were too short to market. Such waste does not happen now as we have asked our customers to be more realistic about what they really need and can make use of. If a woodworker specializes in making rocking chairs they can make use of short lengths of lumber: there are very few 16-foot-long rockers out there.



**Figure 3: Small pieces of high quality koa wood go to manufacturers of pen sets and other small crafts.**

We are running out of old growth koa to harvest at this time. I do not think koa lumber from 25 to 45-year-old trees will ever take the place of old growth lumber, but there will be a place for that material. Many land owners are replanting koa on some of the best parts of their land. While it is encouraging to see this happening, we now will all have to see how these stands of trees are managed and cared for. There are several ways to go about this and I do not think that any one person or group has a perfect plan. I believe that the open sharing of information will be key to having success for all future koa forests.



**Figure 4: A “young koa” log from a 25-year-old tree still has a lot of sapwood.**

Koa should not be thought of as a "brand" or a "market", and should not be thought of as the only truly valuable wood in Hawai'i. Koa is a wonderful wood and koa forests are amazing places. Woodworkers and end users of their work should use koa wisely in the future, and incorporate other local timbers in their work. By making use of the many other introduced and native trees here, we will be able stretch our koa supply and allow the forests the time to recover. I believe the future is bright for koa. With so many people interested and involved with reforestation today the next 100 years look to be very good indeed.