

## Indicator 6.29.

### Total and per Capita Consumption of Nonwood Forest Products

#### What is the indicator and why is it important?

Nonwood forest products are items harvested or gathered from forests that are not traditional wood products. The quantity of nonwood forest products consumed indicates the relative importance of forests as a source of products other than wood and wood products. Information on the consumption of nonwood forest products, especially when compared to sustainable production levels, helps to illustrate the balance between supply and demand. When consumption and available supplies are not balanced, price changes are likely to occur that cause economic effects in the forest sector or elsewhere in the economy. Estimates are provided for nontimber forest products and nonwood forest products. See definitions for these terms under Indicator 26.

The products considered in this indicator are the same as those presented in Indicator 26. They follow the same definition of nontimber forest products (NTFPs), including both nonwood products and selected secondary wood products.

Although annual or regularly collected data on domestic production and prices for NTFPs are generally not available, permit and contract data from the Forest Service and the Bureau of Land Management (BLM) can serve as a benchmark to assess use and value for many NTFPs. Nonwood forest products specifically included in U.S. export data generally have long traditions of international trade. There is also evidence of emerging significance in international trade of some crops from native species,

such as American matsutake (mushrooms). For purposes of estimating consumption for this indicator, production data (Indicator 26) were adjusted by known trade (Indicator 31) and the result was assumed to be equivalent to consumption.

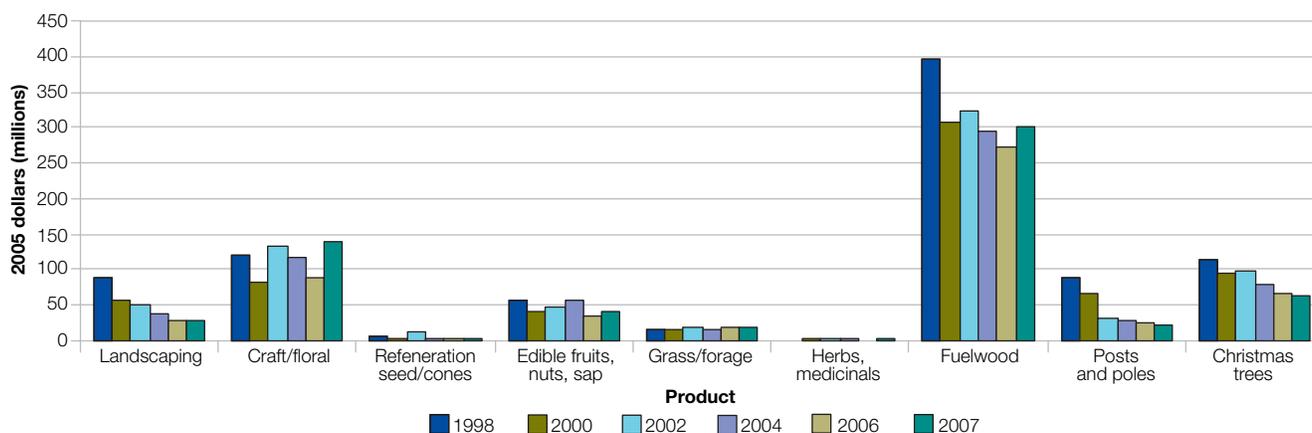
#### What does the indicator show?

From Indicator 26 we have estimates of wholesale value of production for nonwood products and for nontimber forest products. The estimate in 2007 for the national wholesale value of nonwood products produced was about \$232 million 2005 dollars, down 19 percent since 1998 (all values adjusted for inflation and presented in 2005 dollars). For secondary wood products (fuelwood, post and poles, and Christmas trees), it was about \$391 million (down 35 percent since 1998) for a total of about \$622 million (down 30 percent since 1998) (fig. 29-1).

To estimate value of consumption we first estimate the value of net imports of selected nonwood and secondary wood products and then add these estimates to wholesale production estimates. We divide these consumption values by population to obtain the value of consumption per capita.

We obtained value of imports and exports for selected nonwood and secondary wood products using Harmonized Trade Data codes. It was assumed that these selected import and exports are representative of all nonwood forest product trade. This assumption is imperfect, because nonwood forest products

**Figure 29-1.** A rough estimate of national wholesale value for selected nontimber forest products, 1998–2007 (millions of 2005 dollars).



may be included under many different trade codes, but it is not possible to split nonwood forest products out of all categories.

Under these assumptions we estimated that the United States is a net importer of nonwood forest products. Estimated net imports decreased between 2003 and 2007 from \$157 to \$113 million or 28 percent.

The net value of U.S. nonwood forest product trade (imports minus exports) is heavily influenced by vanilla, most of which is imported. Vanilla beans come primarily from Madagascar, and imports of vanilla beans from that country have dropped precipitously since cyclone Hudda in 2003 devastated Madagascar's vanilla-growing regions.

After adding net imports to production we estimate that total consumption of nonwood products decreased between 2003 and 2007 from \$404 to \$345 million or 15 percent (table 29-1). These consumption values should be considered a lower bound estimate as they do not include personal use, undocumented harvest, and certain products that cannot be differentiated in the trade data.

In 2007, the value of net imports of nonwood forest products was about 33 percent of consumption.

Per capita consumption of nonwood forest products has decreased between 2003 and 2007 from \$1.4 to \$1.1 per person (table 29-1).

If we add the net imports of nonwood products to production of all nontimber products, we find that total consumption has increased between 2003 and 2007 from \$748 to \$815 million; per capita consumption has increased from \$2.6 to \$2.7.

**Table 29-1.** Total wholesale value of consumption and per capita consumption of nonwood (not including secondary wood products) and nontimber forest products (including selected secondary wood products), adjusted for trade, (millions of 2005 dollars).

	2003	2004	2005	2006	2007
Nonwood forest products consumption	404	396	270	301	345
Nontimber forest products consumption (includes nonwood products)	748	746	656	701	815
U.S. population in millions	290	293	296	299	302
Nonwood forest products consumption per capita	1.4	1.4	0.9	1.0	1.1
Nontimber forest products (includes nonwood products) consumption per capita	2.6	2.5	2.2	2.3	2.7

These consumption estimates are quite uncertain because error in any of a several assumptions could strongly influence the result.

Trade in nonwood forest products has been a small but regionally important part of the U.S. economy for generations. International trade in species native to North America is subject to many different influences, including globalization of labor markets, movement of processing to countries with competitive advantages, and changes in taste and style. International trade in nonwood forest products, in turn, influences sustainable forest practices, or the lack thereof, throughout the world.

### What has changed since 2003?

NTPF appraisal methods and monitoring of commercial harvesting have improved considerably on Forest Service lands as a result of the Federal Pilot Program of Charges and Fees for Harvest of Forest Botanical Products, established in 2000. The law defines botanical products as florals, mushrooms, and so on removed from Federal forests (excluding wood products), defines fair market value, and requires that permit fees be based on a determination of fair market value and sustainable harvest levels.

### Why can't the entire indicator be reported at this time?

See data limitations noted for Indicator 26. Results do not include consumption for personal use. Regional or national data on both harvest and price of nontimber forest products is not available, other than ginseng.