

HOW MUCH DOES JDSF HARVEST AND WHAT DOES THAT MEAN FOR CARBON AND THE MENDOCINO ECONOMY?

Jackson Demonstration State Forest (JDSF) was created to be a model of sustainable forest management for the redwood region. Sustainable forest management carefully balances the amount of volume (wood) grown over time (i.e. 5 to 10 years) to the amount of volume harvested across the entire landscape each year. Forests that are managed sustainably have more diversity in plants and wildlife, as they provide a variety of habitats and forest conditions. Sustainably managed forests also continuously sequester carbon.

Since 1990, JDSF has cut 472,606,080 board feet of volume, enough to build 26,725 houses. Figure 1 illustrates the amount cut each year. Forest wide inventories, Continuous Forest Inventories (CFI) and third-party Forest Resources Inventories (FRI), are cyclically conducted on JDSF every 5 to 10 years. They are used as monitoring tools to document the growth of the forest through decades. Figure 2 (below) demonstrates that while JDSF is harvesting nearly every year, the growth of the Forest is continuing to far surpass what is harvested and is in an upward trend. To relate this to climate change, active forest growth is carbon sequestration while the existing forest is carbon storage. Through harvests, JDSF is meeting consumer demand for wood products while creating space and freeing nutrients, water, and sunlight to increase stand growth and foster a new generation of vigorously growing trees. This cycle allows the forest to continuously sequester and store carbon¹.

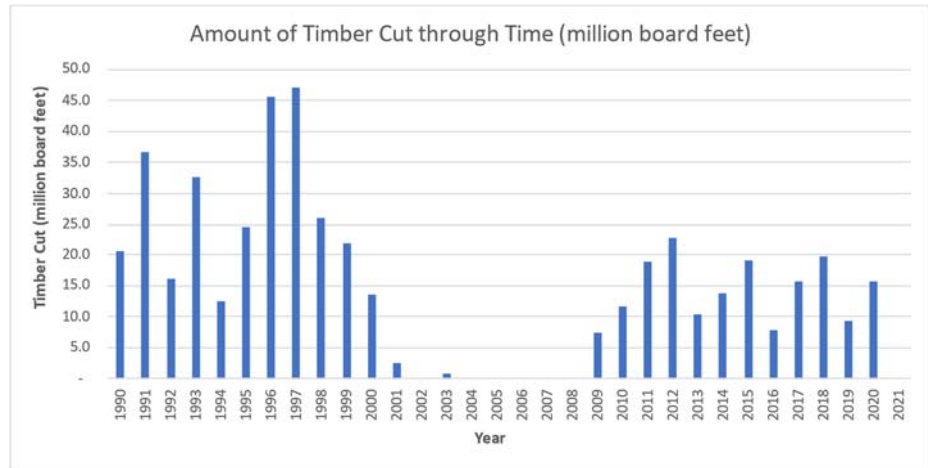


Figure 1: Amount of volume cut from 1990 to present. Data was obtained from JDSF cutting records. 2021 data has not been finalized at this time. The gap between 2003 and 2009 is the shutdown that resulted in the current Forest Management Plan.

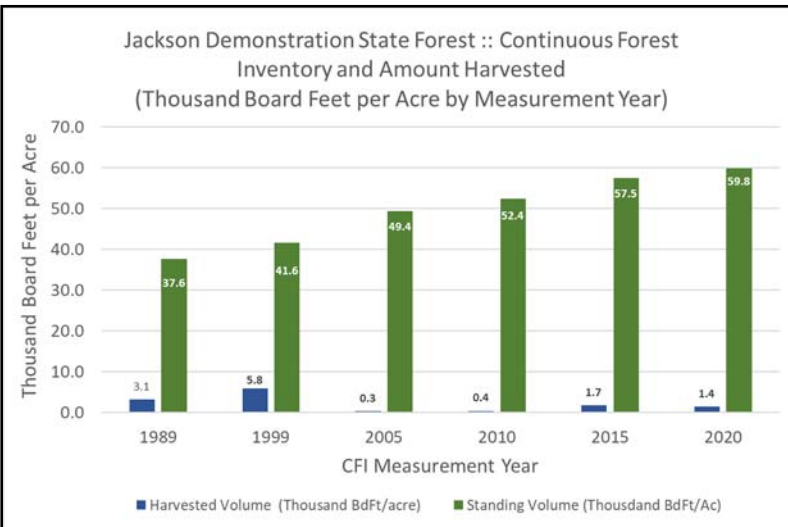


Figure 2: JDSF standing volume per acre compared by harvest amount per acre. The amount of harvested volume (blue) is for the time period between the dates (i.e. the 1989 blue = 3.1 thousand board feet per acre was harvested between the years 1989 and 1985). The amount of standing volume (green) is the volume measured at that date (i.e. the 1989 green = 37.6 thousand board feet per acre was measured to be standing in 1989). Growth is the difference between each year's standing volume (i.e. growth between 1989 and 1999 was 4 thousand board feet per acre).

The JDSF Environmental Impact Report (2008) Forest Management Plan (2016) conducted economic analysis which concluded that for every 10 million board feet of annual harvest:

- 160 jobs are created
- \$4.3 million of local wages paid
- \$184,000 in local taxes generated

Since 1990, JDSF has provided for:

- ~7,561 jobs
- ~\$203.2 million local wages
- Mendocino County ~\$3.3 million in timber yield tax revenue that contributes to the County's General Fund and Mendocino County Water Agency Board Fund²

¹ Lippke et al. 2021. "The Plant a Trillion Trees Campaign to Reduce Global Warming – Fleshing out the Concept." *Journal of Sustainable Forestry*. 40(1): 1-31 <https://doi.org/10.1080/10549811.2021.1894951>
² Angelo, Carmel, J. and Weer, Lloyd. 2020. FY 2020-21 Adopted Budget. *State of California, County of Mendocino*. <https://www.mendocinocounty.org/home/showpublisheddocument/39202/637414011645070000>