

ABOUT SHEEP ECOLOGY

Across America, people have rediscovered sheep for an age-old skill: grazing vegetation to create healthier landscapes.



The American sheep flock grew for the first time in recent memory in 2024 and some of that growth can be attributed to agrivoltaics – the dual use of land for solar energy production and agriculture.

- Sheep are naturally suited to the job of solar grazing. They enjoy the shade of the solar panels on hot days, napping and grazing where humans would struggle to reach. They are resourceful foragers, walking to search for vegetation that might otherwise become a shady nuisance for the solar company. And they reduce or eliminate the need for mechanical mowers with the solar arrays.

Sheep eat a wide range of plants, even some that are toxic to other animals, making them ideal for tackling noxious weeds invading millions of acres of public and private land.

- In Nevada, where the invasive weed tall-white top has infested banks of the Truckee River, sheep graze down the weed and weaken its root system without expensive herbicides.
- In Stillwater County, Mont., sheep are being used to manage thousands of acres of leafy spurge.

Sheep can promote healthy forests by grazing the vegetation that crowds out and competes with trees.

- In California, Oregon, Washington and Canada, sheep grazing in forest plantations can double the number of healthy trees and increase each tree's growth by 30 percent compared with areas not grazed.
- In Montana, sheep are being tested to control Ponderosa Pine, which encroaches on native ranges reducing forage for wildlife and livestock and decreasing water flow in springs and creeks.

Farmers and ranchers are finding that sheep grazing can fight weed and insect pests in agronomic crops.

- Montana wheat producers found that sheep grazing in

harvested grain stubble suppress over-wintering wheat stem sawfly larvae by 67 percent, better than tillage and burning.

- In Southern California, where thousands of sheep graze alfalfa in winter, the sheep graze down weeds as effectively as herbicides and suppress insects.

Sheep eat woody and broadleaf plants and tall weeds and grasses, making them useful for reducing the dangers of wildfire that have scarred millions of acres.

- Wildfires open the door for unwelcome invasions of cheatgrass, which dominates the landscape and speeds up fire cycles. With properly timed grazing, sheep can mow down cheatgrass, preventing seed production and encouraging regrowth of native grasses and shrubs.
- The East Bay Regional Park of California has spread thousands of sheep, goats and cattle across its various parks to graze back grass and brush that could otherwise fuel wildfires. The grazing also minimizes weeds and improves grazing and habitat for the parks' wildlife.

As you can see, sheep are providing valuable services beyond wool, meat, milk and lanolin. And these ecological services are in demand from a widening array of customers.

- In wine-producing regions, using sheep to graze vineyards is becoming a more popular option, especially among those with more biodynamic or organic production systems. The sheep are used to graze on the cover crops and on the weeds found between vineyard rows.
- As sheep continue to prove their ecological worth, municipalities, government agencies and private companies have become willing to pay for their service. At the same time, producers are using great care in shepherding their flocks to protect water, employ proper timing, avoid overgrazing and mitigate negative interactions with people and wildlife. The industry has developed guidelines to help sheep producers refine the techniques of ecological grazing resulting in healthier landscapes across America.