

ENSURING A SUSTAINABLE FARMING FUTURE WITH MODERN CROP PROTECTION TOOLS

The Availability Of Pesticides Is Critical To Supporting Farmers' Conservation Efforts

Conservation practices like no-till farming and cover crops are key to helping farmers improve soil health and reduce agriculture's impact on the environment. These practices are made possible only by using technologies like glyphosate—the most commonly used herbicide.

THE HIGHLIGHTS

While not often associated with sustainability, herbicides increase carbon sequestration and help **reduce CO2 emissions and fossil fuel use** in U.S. agriculture.

- Herbicides ensure there are fewer weeds competing with crops for nutrients, water, sunlight, and space, resulting in more productive harvests with less land.
- Herbicides allow farmers to adopt practices like **conservation tillage**, saving farmers time and money while also **limiting erosion and water loss to help keep soils healthy** and reduce emissions.
- These tools aid land management and wildfire prevention. Invasive weeds fuel fires by crowding out native plants and creating dry, flammable debris. Controlling them early helps safeguard farms, ecosystems, and communities.

CONSERVATION BENEFITS

Corn, cotton, and soybeans—three of the top five crops in the U.S.—would require more than three times the land, water, energy, and greenhouse gas emissions to grow without pesticides, according to the University of Arkansas.

Since 2016, glyphosate has enabled reduced tillage practices, resulting in:

- 1.2 million fewer tons of CO2-equivalent emissions from farm machinery, as reduced tillage results in less fuel use
- 32.5 million tons per year of additional CO2 captured by farmland soil due to minimizing soil disturbances
- 19% lower water usage for irrigation

The total farm-level effect of increased carbon sequestration and decreased fuel use is the equivalent annual emissions of 36.5 million acres—the size of Iowa—of forests.



MODERN AG ALLIANCE

Hear from farmers on how they depend on glyphosate for conservation