



RANGELAND ANALYSIS PLATFORM

Monitoring Rangelands Across the United States



WHAT IS THE RANGELAND ANALYSIS PLATFORM?

At its most basic, the Rangeland Analysis Platform (RAP) is **rangeland vegetation data**. By analyzing that data through a suite of applications, RAP allows rangeland practitioners to evaluate vegetation through **space**

and **time** and at a variety of **spatial scales**. RAP is a rangeland management and monitoring tool intended to be used alongside local data and knowledge to develop sustainable rangeland management strategies.



Vegetation Cover

Rangeland Production

Data layers



Frequency

Yearly

16-day
Yearly

Units

Percent cover

lbs/acre

What data does RAP provide?

RAP uses field-collected vegetation data, satellite imagery, and other environmental data to produce two core datasets:

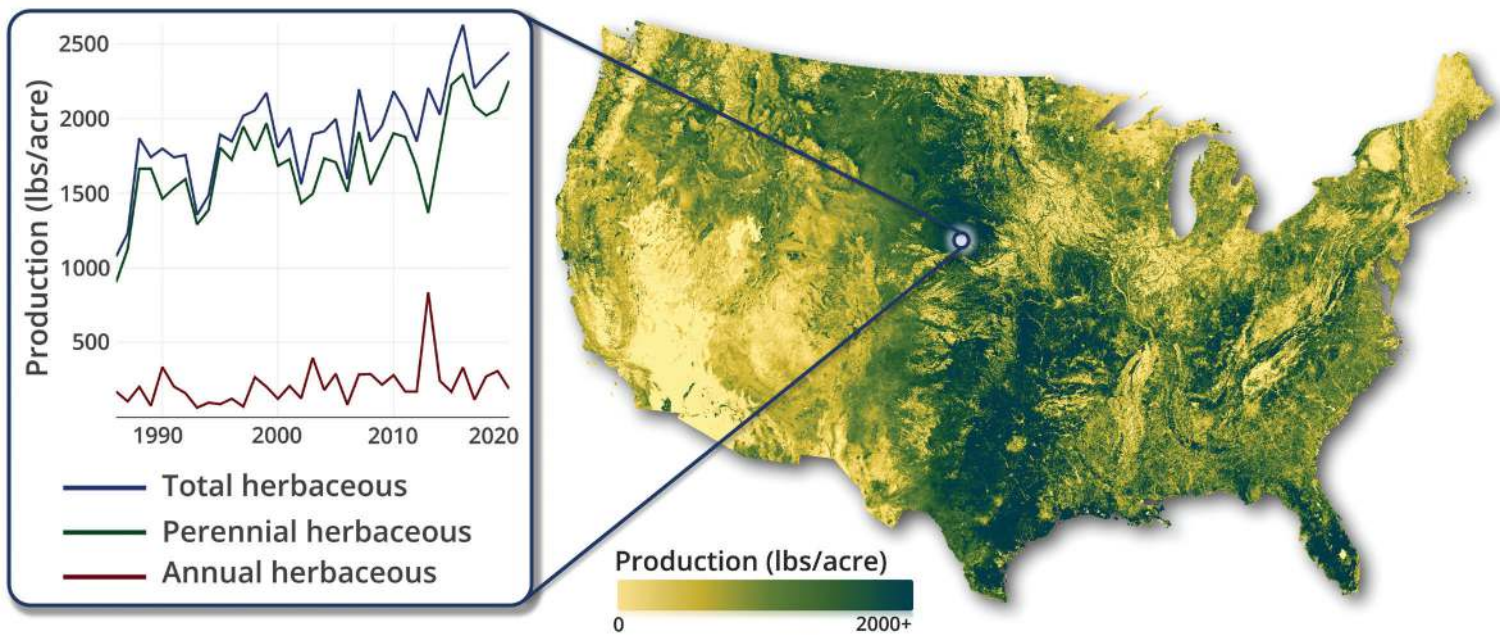
1) Vegetation Cover, provided in percent aerial cover from 1986 to present, for five vegetation types: perennial forbs and grasses, annual forbs and grasses, shrubs, trees, and bare ground.

2) Rangeland Production, provided in lbs/acre every 16 days from 1986 to present, for two vegetation types: perennial and annual herbaceous plants.

Both core datasets are available for all rangelands across the contiguous U.S. at a 30 meter resolution, about the size of a baseball diamond.



rangelands.app



What can RAP be used for?

RAP data is helping to address some of the most pressing issues facing U.S. rangelands such as woody plant encroachment, invasive plants, drought, and fire. A host of federal agencies, organizations, scientists, and others are already using RAP to inform management strategies and monitor outcomes.

How does RAP help rangeland practitioners?

Since its release in 2018, RAP has helped rangeland practitioners easily visualize, assess, and monitor rangeland vegetation at multiple scales. Combining RAP with local data and knowledge provides unique perspectives that were previously unavailable. RAP datasets are backed by peer-reviewed science, allowing users to apply them with confidence.

How else can RAP data be used?

RAP web applications deliver data, figures, and reports tailored toward user needs, making it easy for anyone to use these large datasets. Current RAP apps and data products help to evaluate variability in rangeland production, estimate stocking rates, assess fire probabilities, estimate production loss as a result of woody plant encroachment, and more.

Is RAP just for managers, practitioners, or landowners?

No. Scientists and researchers are leveraging the power of RAP to produce cutting-edge science that, in turn, informs land management efforts.

Who developed RAP?

RAP was developed by the University of Montana in collaboration with the USDA's Natural Resources Conservation Service and Department of Interior's Bureau of Land Management.



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Photo: Jeremy Roberts/Conservation Media



United States
Department of
Agriculture

Natural Resources Conservation Service

