



JOURNALMAP
Research. Reimagined.

JournalMap is a scientific literature search engine that empowers you to find relevant research based on location and biophysical variables as well as traditional keyword searches.

Pick up your smartphone and ask “Where is the closest coffee shop?” The phone gives you a map showing coffee shops in the neighborhood. You choose one and ask for walking directions and the phone displays a map with an arrow guiding your path.

Not all information is so easily searched geographically. “What published studies were conducted around here?” will yield no map, no answer because the location information needed to find nearby research is locked in the studies in a way that is not searchable.

The ability to find what is known about a specific place is still hindered by search technologies that primarily rely on keyword, topic, text, and author searching – concepts of cataloging and searching for published information that date back to the late 1800’s.

Until now . . .

The process of discovering, visualizing and sharing relevant scientific research across multiple disciplines or publishers can now be exponentially improved through the use of geographic attributes coupled with the power of map-based search tools.

A vast quantity of scientific research is tied to specific places or only relevant to specific geographic attributes. Only **JournalMap** puts purpose-built tools and search technology to work so location data can be leveraged for the discovery of research based upon **study area locations**.

Following two years of focused development, refinement and collaboration with publishers, JournalMap is now modernizing and streamlining how scientists and researchers can quickly locate published research that is truly relevant to their own interests and needs via the **geography of science**.

Find research for a specific location.

All articles in JournalMap are geotagged based on locations reported *in the study* and plotted on a world map, allowing you to easily discover and visualize research occurring in specific areas and where data gaps might exist.

Find research in environmentally similar areas.

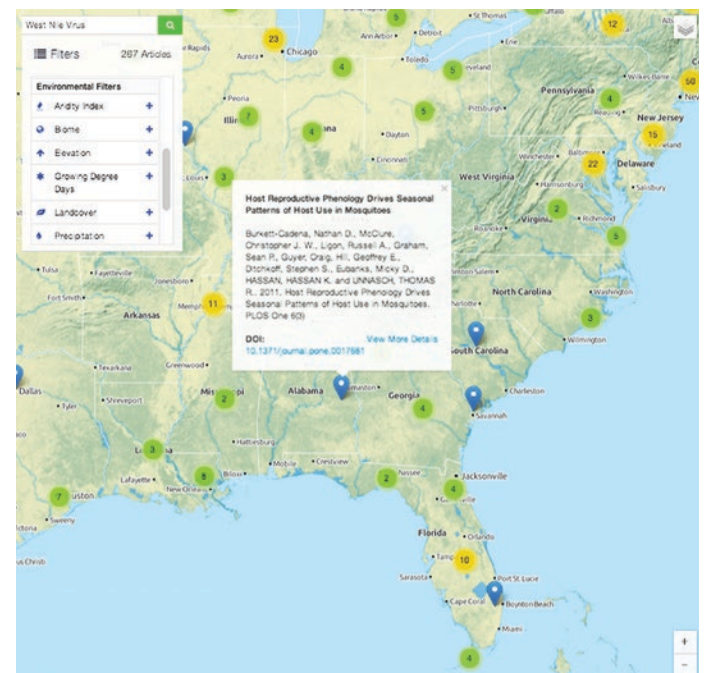
JournalMap makes it easy to search for literature from similar areas. For some topics, there have been few formal studies conducted in many parts of the world. However, research from areas with similar environmental features like climate or soils can, in many cases, be relevant to these understudied regions.¹

Location is everything.

Visualizing the location of research can open new possibilities for discovering and applying scientific knowledge. JournalMap makes it possible to search for published literature thematically and geographically to support research, meta-analyses, identify bias, and limit redundancy.

¹ Karl, JW, Herrick, JE, Unnasch, RS, Gillan, JK, Ellis, EC, Lutters, WG, and LJ Martin. 2013. Discovering ecologically relevant knowledge from published studies through geosemantic searching. *BioScience* 63(8):674-682.

JournalMap view of search results for “West Nile Virus.”



The Challenge

Identifying and extracting the myriad formats of location information from studies is necessary to geotag articles that have already been published. But the lack of standards for reporting locations in studies makes this process very difficult.

With JournalMap we have developed a semi-automated approach to geotagging articles where algorithms identify coordinates when present and remaining articles are manually geotagged from place names. With the adoption of standard location reporting practices in journals and the incorporation of location fields in article metadata, geographic searching would become easier and more universal.²

Benefits for Authors

- You can upload your own research into JournalMap, becoming part of our growing database of over 7,000 articles.
- JournalMap offers easy-to-use tools for geotagging your own published research.
- Author Collections give you the ability to showcase your own works via a unique URL and map-based presentation.

Author Collections showcase individual published works.

My Spatial Ecology Articles
latest article added on August 2013

This is a collection of articles I have authored on different applications of spatial analysis and land health monitoring techniques in ecology.

My research at the Jornada focuses on the applications of geographic information systems (GIS), remote sensing, multivariate and spatial statistics, and ecological informatics to sustainable land management. I am the lead PI on the Landscape Toolbox and JournalMap projects, and I work extensively with the Bureau of Land Management, Natural Resource Conservation Service, and other federal agencies on the development and implementation of land health monitoring strategies and techniques.

author by
Jason Karl, Ph.D.
Research Ecologist
USDA ARS Jornada Experimental Range

jkarl@nmsu.edu
575-646-1301

LOCATIONS ARTICLES (13)

Map showing locations of articles across the United States, with markers indicating specific geographic areas.

² Karl, JW, Herrick, JE, and JK Gillan. 2013. Geographic searching for ecological studies: a new frontier. *TREE* 28(7):383-384.

A Resource for Publishers and Scientific Societies

JournalMap is an incredible tool for making your published articles available to current or potential subscribers via an innovative and evolving search platform. When your article is found, users are directed to your website for access or purchase. Our collaborative pilot with Taylor & Francis has resulted in the geotagging of the complete archives of three scientific journals. This pilot is demonstrating how JournalMap can be a valuable tool in both article submission and eProduction processes. **We are now extending the invitation to all publishers to discuss how we can automate the geotagging process and the addition of their publications to JournalMap.** Additional benefits to publishers include:

- Geotagging services for bulk processing of journal archives.
- Publisher landing pages, journal issue and article collections.
- Conversion and publisher analytics reporting.
- Collaborative development of location reporting industry standards.

Looking Ahead

JournalMap is still in active development, and we have many exciting new developments. Our primary goal is expanding the quantity and breadth of available journals and volumes in JournalMap. We will continue to add geotagged articles through research projects and collaborations with publishers. We are also continuing to add new features to the JournalMap platform like notifications of new articles from a defined area and web services to integrate JournalMap into other third-party applications.

Contact Us

If you're interested in learning more or collaborating with our team, visit www.journalmap.org or contact:

Jason Karl, Ph.D., Research Ecologist
USDA Agricultural Research Service
Jornada Experimental Range
jkarl@nmsu.edu
575.646.1301



A Partnership Between:

