

INTEGRATION

The newsletter for Geo-spatial and Range Sciences

This newsletter is produced by the GIS Training and Research Center at Idaho State University, 921 S. 5th Ave., Stop 8104, Pocatello, Idaho 83209-8104

The Wiki of Science

For hundreds of years Science has been trying to understand the world we live in and make discoveries to allow us all to live better lives. The questions addressed by basic science have been focused ones, and scientists in fields such as genetics and cellular biology have made great strides toward understanding their respective vocations. Applied scientists have also made great strides of understanding, but we have now come to a time when focused, singular minded applied research has stalled. It is not that today's scientists are somehow inferior to those of yesterday, but instead, it is the complexity of the questions being studied that has caused the stall.

Collaborations are common today, and indeed, the vast majority of papers being published are the result of a select team of scientists who have each contributed part of their uniquely qualified minds toward the analysis and interpretation of a question. You see, the way today's collaborative research works is some central figure (the principle investigator (PI)) initiates a fairly substantial research project and then, to accomplish the goals set forth for that project, the PI assembles a team of colleagues (co-investigators) each of whom is believed to have some special skill that will satisfy one part of the larger research project. The key to understanding this system of research is the realization that all investigators are colleagues and almost always well acquainted with one another well before the study begins. In other words, the people involved in solving the problem are pre-selected.

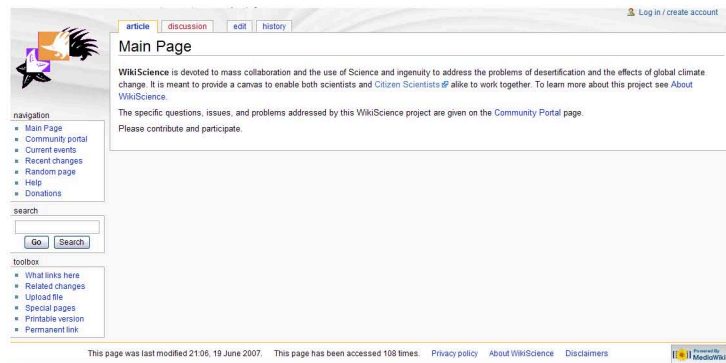
When faced with large and complex problems (e.g., rangeland health, desertification, and global climate change), traditional collaborative research breaks that problem into manageable chunks (chunking) and then takes on only those chunks that its team feels ready, willing, and able to address.

But some problems may be "un-chunkable". In other words, the parts do not act the same when taken out of context. Just as oxygen does not act like water when separated from the hydrogen twins, sagebrush does not act like a rangeland when separated from soil, water, animals, ranchers, and recreationists.

So is this the end? Is it our fate to have to watch once productive rangelands desertify under the effects of global climate change? I think not, and with your help, we too can make great strides of understanding and change.

We don't know everything, but with mass collaboration, we may be able to tackle some very big questions.

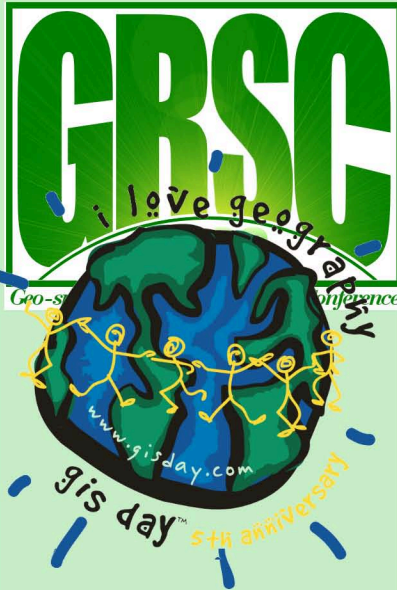
Mass collaboration is not common today, but where it has been used it has been very successful. The way mass collaboration works is some central figure (the champion) articulates a problem, develops a collaborative canvas upon which all can work (typically an Internet Wiki), and then sets about building momentum for the project. Initial participants are typically pre-selected and invited to take part, but as time passes and the project progresses it becomes an open, distributed, and decentralized co-laboratory capable of great things. The real difference between traditional collaboration and mass collaboration is the people involved in solving the problem are self-selected.



The potential for mass collaboration is very exciting and I invite you to participate and share your time, experiences, and uniquely qualified minds to help solve the problems of rangeland degradation and desertification. Our collaborative canvas is waiting, just visit <http://giscenter.isu.edu/WikiScience> and try!

Don't miss our first joint GIS Day/ GRSC this November. Our schedule of events is filling rapidly and we have already lined up a number of very good presentations including our special guest speaker, Allan Savory.

You may also be interested in trying your hand in our 3rd Annual Chili Cook-Off, sponsored by Northern Rockies URISA. For full details, visit the event website at <http://giscenter.isu.edu/gisday>



Join us for GIS Day and
GRSC 2007 at ISU!
Its November 14th and
its free! Visit
<http://giscenter.isu.edu/gisday>
for details.

