



NEGOTIATING SCIENTIFIC DATA SHARING AGREEMENTS TO CREATE IMPORTANT EXTERNAL PRODUCTS: THE ATLAS OF GLOBAL CONSERVATION

An ambitious effort by The Nature Conservancy to create the world's first global conservation atlas and database highlights the need to respectfully negotiate agreements.

On Earth Day, 2010, The Nature Conservancy published *The Atlas of Global Conservation*, a concentration of the best conservation data from over 70 institutions, including the World Wildlife Fund, United Nations Environment Programme and a number of universities representing the work of hundreds of scientists. The centerpiece of the *Atlas* is a series of spectacularly detailed conservation maps, searchable kilometer by kilometer and assembled on a consistent framework so that maps can be compared against one another. Fourteen authored essays gave a human voice about the state of the world from leading conservation thinkers, including Paul Ehrlich, Daniel Pauly, and Gretchen Daily.

The goal of the project was to bring together an unprecedented breadth of terrestrial, freshwater and marine global data about the distribution of species and habitats around the world, the threats they face, and the conservation actions that are needed to protect them. This data was initially compiled as part of the Conservancy's 2015 goal-setting work.

The goal of repurposing the data into a book with external relevancy required a new effort of partnership-management. Through existing collaborations/colleagues and new partnerships, Conservancy scientists collected data from some 70 institutions to make the maps in the Atlas.

Challenges to this effort included overcoming the understandable need for scientists and institutions to be proprietary about their data and getting legal permissions from partners to publish the maps in the book and online.

The *Atlas* staff authors worked closely with scientists, respecting and understanding the professional precedents that made sharing data unattractive. However, this reluctance was overcome by using four principles:

- Clear explanations about precisely how the information would be used were provided.
- Where required, a formal written data sharing agreement or contract was signed and legal documentation for the rights to public maps in the books

and on the web were procured.

- Respecting and appreciating the generosity of these scientists and institutions by building and maintaining trust.
- Working relationships involving deadlines were constructed and implemented in ways acceptable to all parties. This entailed a lot of formal and informal communication and ensuring that proper credit was given for contributions. Source information is tightly linked to maps and data in the book and online maps.

The *Atlas* and the relationships built in the making of it have been a very successful profile-builder for the Conservancy, and have also strengthened the Conservancy's scientific reputation. Work continues with the Conservancy's marketing department to communicate its utility and importance to the widest possible audience.

Of equal importance, it provides an example for others that data can be shared respectfully and competently. The *Atlas* team hopes this grand endeavor will embolden other datasharing efforts.

For more information about the Atlas of Global Conservation, visit http://www.nature.org/tncscience/maps/.