

USING INFORMATION TECHNOLOGY TO SUPPORT COLLABORATIVE PROCESS: THE SISTRURUS INFORMATION NETWORK (SIN)

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INTRODUCTION

Original sin - Adam and Eve, an apple, and the snake. Biblically, the negative portrayal of snakes goes back to the beginning of creation. The price these creatures have paid for that portrayal - and the negative image most humans have of snakes - has been harsh. It is the hope of the Massasauga Recovery Team that through information - the knowledge that was original sin - the eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) and the natural communities in which the species' resides can be recovered and given a valued place in our future.

The facilitating role that can be played by the World Wide Web in collecting and disseminating information in aid of conservation is astounding. As an example, in 1990 I wanted to answer a few questions of relevance to the conservation and management of genetic structure in black rat snakes (*Elaphe o. obsoleta*). To do so required that I obtain DNA from a series of widely distributed populations. The Net offered a highly efficient means of solving this logistical problem. In less than a week of broadcasting a request for assistance, I was flooded with replies, enabling me to coordinate and mobilize a dozen fieldworkers (all "strangers") from Ontario to Florida and Maryland to Arkansas. Needless to say, I got the DNA. Without leaving my desk, the WWW has also allowed me to introduce myself, swap ideas, exchange data, and conduct analyses with "virtual" colleagues from around the globe including places such as Jamaica, St. Lucia, South Africa, Hamilton, Memphis, Oregon, and the United Kingdom.

The Sistrurus Information Network (SIN) is your tool. It is a collaborative tool and will require your contributions. This network represents a significant advance in web-based communications and was designed to coordinate and streamline the activities of the Massasauga

Recovery Team, participating stakeholders, and other cooperators - regardless of where they are located. SIN will allow us to securely catalogue digital data, documents, newsletters, and other forms of information for easy access by registered users. In addition, SIN will enable us to hold on-line teleconferences, debate issues in open forums, deliver materials via flexible distribution lists, and post notices. It is my expectation that SIN will lead to effective recovery of the eastern massasauga. We may be able to recover the species without SIN but frankly, I think we can use all the advantages available to us. Grab an apple; welcome aboard.

WELCOME TO THE SISTRURUS INFORMATION NETWORK

Multi-agency initiatives are no longer an uncommon phenomenon in today's working environment. However, the decentralized locations of the participants in these initiatives can often impede the timeliness of information exchange, knowledge development and the collaborative creation of working products. The National Recovery Team for the Eastern Massasauga Rattle-

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snake (*Sistrurus catenatus catenatus*) is embracing a new tool to facilitate the challenges inherent to multi-agency working groups ~ The Sistrurus Information Network (SIN).

The initial need for an internet-based communication system was identified in the Communication and Coordination Strategy of the draft National Recovery Plan. The intent behind the development of this communication tool is to facilitate bi-directional information flow among team members, working groups and U.S. counterparts. In addition, a secure data archive system to disseminate monitoring data, landowner survey results, reports, funding proposals and other digital resources was highlighted as a requirement. The needs of the recovery team grew beyond the simple disseminating characteristics of a traditional website.

The Sistrurus Information Network (SIN) is an advanced web-based resource that has powerful collaborative tools incorporated into its design. Following a convergence philosophy, the online resources were built to interface with standard fourth generation web-browsers (i.e., version 4.0 releases). These Java-enabled browsers allow for powerful applications to be run over conventional modem connections and Pentium computer platforms. This provides the robustness of applications typically found on advanced networks but without the need for

end-user client programs, software plug-ins or data file replication (downloading all of your personal files). Thus the SIN end-users can also access their collective resources at a colleagues' computer, at home or "in the field".

To date the following services are available from the Sistrurus Information Network:

- Automated user sign-up and password verification;
- Live Tele-conference area;
- Forum Area (threaded messages provides lineage);
- Searchable File Libraries (simple meta-data descriptions);
- Automated Distributed Mailing Lists;
- Active Desktop Channel;
- Site Search Engine.

There is no such thing as a "technological imperative" in multi-agency processes. It is not necessary to introduce technology if it is not consistent with the requirements of a working group or fails to live up to expectations. Careful attention must be given to the technological design and communication model while never losing sight of the end-user and their specific needs. Data sharing and collaborative knowledge development is not a technical exercise as much as it is a social

one. Individuals must still provide the leadership, imagination and determination if information technology is to assist multi-agency partnerships succeed in their endeavors.

The Sistrurus Information Network (SIN) has begun its initial content collection. The contributions and development of material within its database will ultimately define the utility of this resource. Future network development will focus on direct support for collaborative and dynamic development of the National Recovery Plan itself as opposed to supporting data and documentation. The National Recovery Team for the Eastern Massasauga Rattlesnake is enthusiastic about its progress and invites you to log-on, review and contribute to the Sistrurus Information Network.

<http://www.terra-plex.com/sin/>



Figure 1: The Sistrurus Information Network