

# Southern Appalachian Regional Information System

## SARIS

Progress Report, August 31, 2000

### SARIS node of the National Geospatial Data Clearinghouse

SAMAB's node of the National Geospatial Data Clearinghouse is now fully operational!

Our site approval was delayed because of problems with the Federal Geographic Data Committee's Isite software that failed to work when receiving spacial queries and had a tendency to hang upon receipt of such a query. We spent much time with troubleshooting and waited in vain for more than two months to receive technical feedback from an FGDC contractor, who repeatedly promised to "get to it in a couple of days." We never were certain which version of Isite we had. The installer software we downloaded from the official location on the FGDC's software site claimed to be installing version 2.06, but the server software reported itself as version 2.05. We never got clarification from the FGDC to repeated queries about this version numbering discrepancy and how to get the most recent release.

Meanwhile, we updated the watershed metadata on our catalog server and added additional metadata files to the catalog. We also discovered and installed version 2.06a of Isite on an FGDC server. We had seen this version pop up on some nodes of the Clearinghouse list, but no official announcement of its availability. We are not sure which of our activities resolved the problem with the spacial queries, but our server finally passed the validation tests and was included in the FGDC Clearinghouse list.

At some point during the third week of August the server stopped working for textual queries, but still responded correctly to spatial queries. Server process restarts, which previously helped with the spacial-query problems, did not help, but a system reboot did. It has been working OK for an entire week now. (Allen Voss told Wolf Naegeli that the TVA Map Store in Chattanooga has had major reliability problems with their Isite server, and we have heard that many other Clearinghouse nodes have had a less than pleasant experience with it as well.)

You can query our new metadata catalog server by pointing your web browser to <http://www.fgdc.gov/clearinghouse/clearinghouse.html> and choosing "Search for Geospatial Data" from the menu.

A map appears from which you have to choose a gateway. The NOAA gateway usually works pretty well. There are many different ways you can search for data. For an example, search "using United States Placenames" (though we'll actually not select a place). On the next page, don't search based on location or time period for this example, but enter "watershed" (without the quotes) to search as Full-Text in the field "Anywhere." From the scrolling list of Data Servers to Search, select "Southern Appalachian Regional Information System (SARIS)," then click the "Search the Clearinghouse" button. This example query should retrieve three records (all we currently have on our server). We are working with SAIC and the University of Tennessee Libraries to add additional records soon.

If you have a Z39.50 query utility, you can search our node directly at Host: saris-isite.samab.org, Port: 210, Database: SAA.

### SARIS clearinghouse on the Geography Network

In August, ESRI launched Geography Network, a global community of data providers who are committed to making geographic content available. Geography Network provides user-friendly access to free as well as royalty-charging data. It is based on FGDC and Open GIS Consortium standards and includes an interface to the National Spatial Data Infrastructure (NSDI). The first Geography Network portal is at <http://www.geographynetwork.com/>. Our testing has shown that locating and viewing data on the Geography Network generally works more smoothly and reliably than locating data on the NSDI. The question is, how well this fascinating new service will stand up to heavy demand, which is likely to build up rapidly as more users discover web mapping on demand.

We have registered SARIS as a Geography Network clearinghouse, and it should show up in Geography Network data searches shortly. In return for a major software grant for SARIS, we are expected to bring up a map service on Geography Network soon. The capability to overlay SAA data with themes from other data sources will greatly enhance the usefulness and value of our data. All new and upgraded ESRI products will support direct access to Geography

Network data sources. Because this capability is based on open standards, it is expected that other vendors will follow soon. Before long, computer users will see tools incorporated in their word processing, spreadsheet, presentation, and other software applications that will make it very easy to include custom maps in any document.

### SunSITE and SARIS software installation and prototyping

SunSITE configuration work for SARIS made some progress in August, albeit much slower than we had hoped. After our communications server was down for several weeks, a new version of Lyris arrived. Installing the upgrade was more involved than the vendor had claimed, but eventually was successful. Unfortunately, when we wanted to load a prototype service with a real user list on August 30, we discovered that the server process had stopped responding, and learned that the system administrator will be on vacation until September 5.

Also, installed was the Java applet server which is needed as an intermediary between SunSITE's Apache web server and our Internet Map Server. Components of the Map Server were also installed. Because of the extreme workload of the SunSITE system administrator we were given authority and responsibility for completing the installation, but at present we lack some information necessary to complete the job.

Meanwhile, we installed a very similar configuration on Windows Professional 2000. Wolf Naegeli demonstrated a SARIS web map prototype at the SAMAB quarterly meeting on August 8, using laptop computers as server and client platforms, with Netscape Navigator as the client software environment. Since then we have continued the prototype development. This work has been difficult because of the instability of the Windows platform. We are eager to transfer it to SunSITE soon, which will give us the opportunity to solicit feedback from the SARIS tire-kickers group of volunteer prototype testers.

### Urban and Regional Information Systems Association Conference and Exposition 2000

Wolf Naegeli attended the annual URISA conference. His poster about the SARIS project was prominently placed at the entrance to the central lobby and met with much interest. He led a roundtable discussion about public access to GIS data and discussed SARIS issues with practitioners and experts from software vendors and other research institutions. He could arrange for a major donation of software to the SARIS project, with free support and upgrades for the next two years.

### SARIS spatial data warehouse

We added information to the data area of the SAMAB website <<http://samab.org/>> on how to access the new dataset formats loaded last month, until we implement the new user interface.

We discovered several corrupted files in the online SAA database and have replaced them or are regenerating corrected versions.

Thanks to the strong interest and generous support of SARIS by Dennis Yankee and Roger Tankersly of TVA, we obtained a new MLRC landcover dataset for the SAA region. We expected to have it warehoused by the end of August, but discovered last week that the reprojection step had been skipped in the processing job that generated the dataset. That step requires about one and one half days of processor time. When Roger came back to work the morning after it was finally possible to schedule the job, he discovered that the computer had crashed at night. The job had to be rescheduled. Thus, we will not get the final data set until after Labor Day.

Current limitations in ArcIMS made it a major challenge to prepare this 650MB raster dataset for web mapping. More than two hours of advice and support from several ESRI staff at URISA 2000 didn't get us much further, but thanks to their hints we believe we have found a workable solution.