OUTREACH EVENT REPORT AND RECOMMENDATIONS

Report Writer: Joseph Kerski, Geographer: Education/GIS

Other USGS Representatives:

Steve Vandas - Water Resources Pete Modreski - Geology Pat Schassburger - Biology

Purpose of Event:

Conduct presentation and assist with operation of USGS Exhibit: Colorado Association of Science Teachers

Location: Merchandise Mart, Denver, Colorado.

Date: 4-5 October 2001

Summary:



Denver Merchandise Mart, site of 2001 Colorado Science Convention.

The USGS Central Region Outreach Team ran a USGS exhibit at the 2001 Colorado Science Convention. The outreach team also conducted 3 workshops at the conference (see below for list). These workshops generated a great deal of additional inquiry at our exhibit.

This event attracts between 500 and 800 teachers each year, primarily K-12 science teachers, university science and education professors, and the scientific instrument and education vendor community. We took this opportunity to further our relationship with regional and state educational organizations (see below for list).

In our exhibit, we emphasized our earth science week activities, new products, and new research, along with traditional science educational materials. We operated in a corner area of that allowed us frontage on two sides, which was excellent for the maps, posters, and videos that we gave away at the event. See below for photograph.



USGS exhibit at the Colorado Science Convention. From left: Pete Modreski, Steve Vandas, and Joseph Kerski. Pat Schassburger also worked at the USGS exhibit (not pictured).

Presentations

The USGS was well represented at the conference in the program. Besides our exhibit, the USGS Central Region outreach team conducted the following presentations

during the conference.

Steve Vandas Teaching About Water Resources Using Resources Available from the USGS

Pete Modreski New Concepts in Earth Sciences, and Teaching About Earth Science Using USGS Resources

Joseph Kerski Exploring the World with a Geographic Information System



Photograph of some of the attendees in my workshop on GIS. Approximately 40 people attended this workshop.

Acknowledgements:

I greatly appreciated working with the Central Region Outreach Team's Steve Vandas, Pete Modreski, and Pat Schassburger at this event and applaud their "going the extra mile" by conducting workshops as well as operating the exhibit. This is a good example of the whole education team coming together for an event.

Recommendations:

1) We might want to use some of the ideas

and materials from this conference, and those that my colleagues in other regions use in their own state science educational events, at the National Science Teachers Association conference, San Diego, March 2002.

2) These are exciting times for science education, with the resurgence of public interest in the subject, and national and state standards in science. Education receives a great deal of publicity. The USGS should continue to pursue educational venues with both an exhibit and a presentation.

3) GIS is being increasingly used in secondary and even primary schools. The USGS should continue to investigate the educational potential of GIS packages so that we can make informed answers to customers who seek to use our data in a GIS.

4) Once again, the use of workshops at a conference tied in well with our exhibit and I recommend that we continue this practice.



Close-up of part of the USGS exhibit at the Colorado Science Convention, showing crowds around our "10 Cool Things About Science" video and our surplus maps and books.

5) I recommend we continue our participation at this event. One of the prime reasons for attending was to network with other Colorado organizations active in science education. We have, since the conference, met to discuss working more effectively and determine *how* we will work with such organizations as the following:

1. Colorado Association of Science Teachers

2. Cooperative Institute in Research in Environmental Sciences (CIRES)

3. University of Colorado Education Outreach Program.

4. Denver Museum of Nature and Science.

5. Colorado Mountain Club.

6. Colorado Earth Science Teachers Network.

7. NOAA, Boulder.

8. NCAR, Boulder.

9. Colorado Department of Natural Resources.



Another view of Pete Modreski and attendees at our USGS exhibit.

Event and Exhibit Planning:

Outreach focus areas covered by this event:

(1) Nongovernment/Industry Relations (5%)(2) Education (95%)

Audience:

Non-Core customers: K12 Educators, university professors, university researchers, scientific data vendors, school district coordinators

Personnel required: Experience working with the public, and knowledgeable about:

(1) Educational applications of USGS products.

USGS activities at conference:

- (1) Conduct workshops for teachers.
- (2) Operate USGS exhibit.

For Backdrop:

Posters on USGS activities for Earth Science Week This Dynamic Planet map Water Education Posters Tapestry in Time Map

Materials

For this conference, we handed out several things that we typically do not hand out:

1) We distributed nearly all 150 copies of the "10 Cool Things About Science at USGS" video that the Central Region outreach team produced a few years ago.

Pete Modreski created an information sheet to accompany the video, and a questionnaire to provide feedback on the video. We had 72 people sign their names and email addresses on our signup sheet for the video; so about half recorded their name. Pete printed up 160 copies each of "Teacher Resource Guide" the and Questionnaire sheets to accompany the video. We had 43 copies left of the Guide and 120 of Resource the Questionnaire, so that means 117 out of 148 people took the Resource Guide, but only 40 out of 148 took the Questionnaire. Pete plans to follow up with the teachers so that we will have response about our first major video production.

2) We distributed almost half (about 95 out of the box of 200) copies of the "Status and Trends of the Nations Biological Resources" publications CD-ROM from BRD that we brought.

3) Surplus topographic maps; very popular.

Backdrop:

Tapestry in Time map, new map of Colorado National Monument

CDs:

Biology CDs with 2 reports (very popular) *Professional Papers*

Nature to Be Commanded

Circulars

Water Quality in the South Platte C1225 The Quality of Our Nation's Water--Nutrients and Pesticides Circ 1200 Estimated Use of Water in the United States in 1995 Circ 1139 Ground Water and Surface Water--A Single Resource

Teacher's Packets:

None. We are so low on stock on these, and we had plenty of other materials to display and distribute.

Water Posters:

Water: The Resource that Gets Used (middle school) Water: The Resource that Gets Used (espanol) Ground Water – Middle School Ground Water – Grade School

Fact Sheets :

Abandoned Mine Lands CD-ROM list Central Region Sources of Information How to Get Info from the USGS USGS Publications in CO and USA USGS GeoData Educational Materials from the USGS FS-082-97 National Atlas Fact Sheet FS-215-95 Water level changes in High Plains Aquifer FS-244-95 Pesticides in Ground Water FS-058-95 USGS Ground-water studies OFR-93-91 Ground Water Atlas of United States and Fact sheet FS-116-99 The quality of Our Nations Waters Colorado fact sheet CO Catalog of Topographic and Other Published Maps CO Map List WWW Information Sheet FS 077-99

GIPs:

Aerial Photographs and Satellite Images Collecting Rocks Dinosaurs: Facts and Fiction Earthquakes Finding Your Way With Map and Compass Fossils, Rocks, and Time Fossils Through Time Landsat historical comparisons Map Projections - folded

Mountains and Plains: Denver's Geologic Setting

Our Changing Continent

River Basins of the United States: The Colorado

Volcanoes of the United States

Other

Pete's rocks and minerals info sheets Fits Starts GIS in education article POB GIS in education article Map Mysteries lessons

Teaching with Topographic Maps

7.5' topographic maps of Colorado Misc. thematic maps Misc. professional papers

end of report