

Chapter 8 Off the Beaten Path...

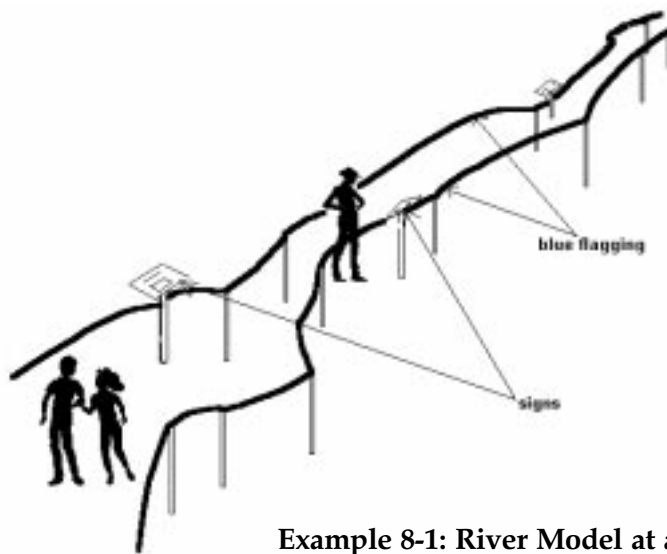
- Data in the great outdoors
- Interactive data presentations
- Do it yourself data
- Recycle that data!
- And did we mention...?
- Props

This chapter provides information on several innovative data presentation examples that we like, but which were either not discussed in previous chapters, or that merit further explanation. There are also a few outreach examples that do not focus on data per se, but which we think would work well as showcases for your data.

Data in the great outdoors

River Model at a Festival

The Farmington River Watershed Association made an interesting model of their watershed at a River Festival: on the side of a hill, they used flagging and small wooden posts to outline the shape of the river from its headwaters to its mouth. At the appropriate locations on the "river," they erected interpretive signs such as you see in parks. On the signs were photographs of the river at that virtual spot, and some information about that location, such as historical events that occurred there or flora and fauna one might expect to see.



Example 8-1: River Model at a Festival.

Ways to Show Data

For data presentation, you can have a data photo showing pollution or a source of pollution, or use a leitmotiv-graphic: the same graphic repeated at each station on the river, with the level of a certain parameter or a water quality index at that sampling site. If using a graph, plot the data for the season or for several years at that site, so people have a frame of reference. Or show data from several sites, with this site's data highlighted. Also useful is to add the criterion you are comparing the data to, such as a line at 6 mg/l (the minimum standard for cold water fishery) if presenting dissolved oxygen. This is a good place to add some educational content to a display. Introduce the river continuum concept by comparing data found at different sites with typical values found in a "reference" stream at comparable headwater, mid-reach, or lower mainstem areas for such indicators as macroinvertebrates, oxygen, pH or temperature.

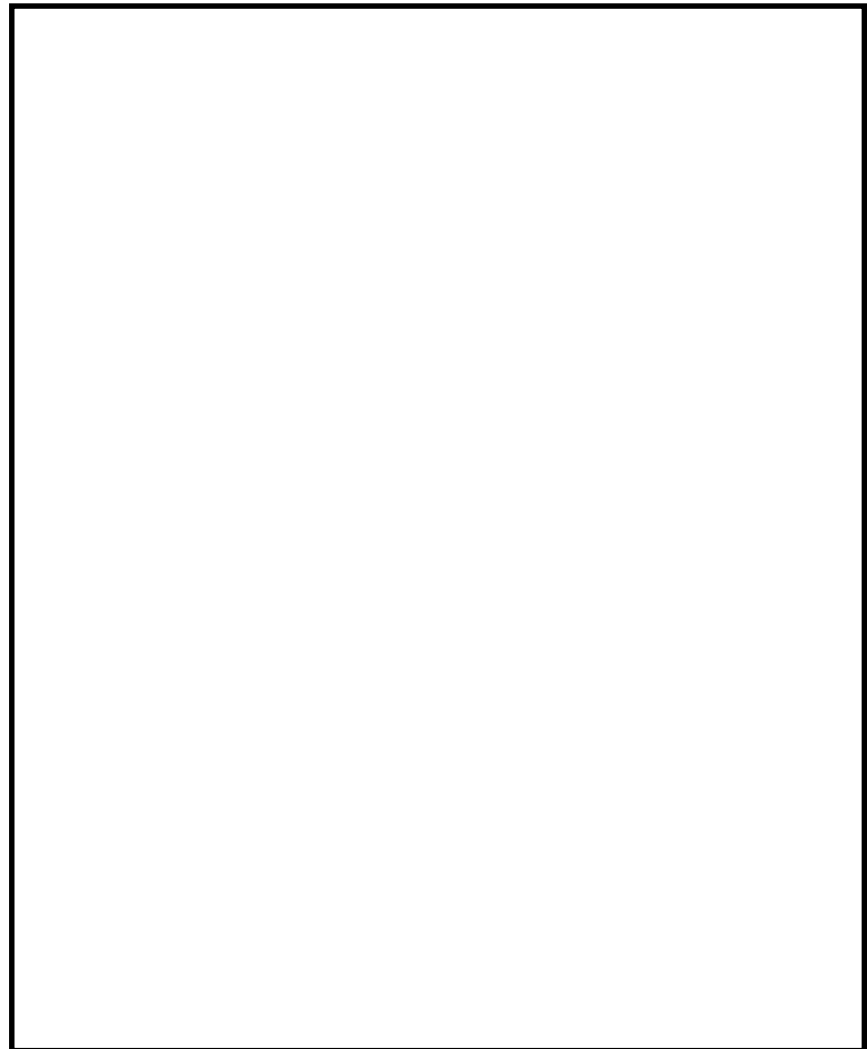
Take me to the river... access sites

Sites where people access a water body are great places to present data in easy-to-read fashion. MassWWP posted signs at several Connecticut River access sites, showing coliform data from samples taken at those sites. As shown on Example 8-2, the most recent results are shown by a colored icon of a swimmer, with color codes representing different coliform ranges. Bright colors are used for better visibility at a distance.

A large-type headline is printed to attract interest. Results from earlier in the season are represented by smaller icons, with numeric values listed below the icons. A short explanatory note informs readers how these numbers compare with state standards for swimming and boating. These signs were accompanied by a map of the river, showing current data from all sampling sites (see Example 5-7). Signs were replaced every two weeks, so laminated paper was sufficient for weather-proofing.

Tell a story with signs

One innovative way to pack a lot of information into an outdoor display is to create a "book," made of hard plastic or wood pages that the reader can turn to get an unfolding story, as shown in Example 8-3 on the opposite page. For practical tips on how to make this or other types of outdoor exhibits, we highly recommend the book *Signs, Trails, and Wayside Exhibits*, by Trapp et al, 1994 (see Reference section).



Example 8-2: Data at a river access site.



Example 8-3: This display is set up like a large print book, mounted on a pole.

Interactive data presentations**Aquatic Jeopardy**

This interactive game provides a nice change of pace at informal settings. Get the audience involved at an annual meeting or League of Women Voters' talk and your message will stay with them much longer. The Lakes and Ponds Section of the Vermont Agency of Natural Resources introduced a Jeopardy-like game at their annual Lay Monitoring Conference. The Aquatic Jeopardy Game starts with a presentation on background information and sampling results. The players are then asked to choose from five categories, such as monitoring, point and nonpoint source pollution, watersheds, etc. They are shown a slide and the contestants must characterize what they see. For example, a picture of a leaking boat engine should elicit a response of nonpoint source pollution, or a graph showing high total phosphorus should prompt eutrophication. Of course, the contestants have beepers in their hands and the pace is kept hopping.



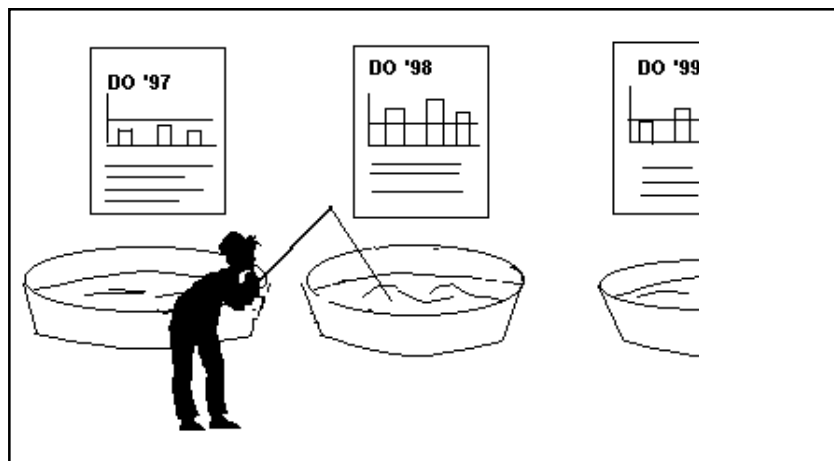
Example 8-4: Aquatic Jeopardy, a participatory live presentation.

Ways to show data

In this instance you show the data in a regular live presentation: go over the science, the results, the locations, and show several times what you want the audience to remember, in essence giving, or at least suggesting the answers to the questions. Then prepare lots of slides of pollution sites, sampling sites, graphs, maybe even equipment they have to name. Overheads will work too in this format.

The Lake Game

This one's great for kids. At their annual Heritage Festival in Sturbridge, the Cedar Lake Association created a game to help their community learn about lakes and associations. The game consisted of four wading pools, fish cut in three sizes from magnetic sign board, a child-sized fishing pole with a large washer attached to the end, and educational posters to lead the players to think about water resource protection. First the players had to read the posters to understand what promotes a healthy lake situation. There were four posters, each representing a different scenario of a densely developed lakefront (one where residents were not active in protecting the lake, resulting in eutrophic conditions, one where they reacted too strongly and killed all the vegetation with chemicals, and two in-between cases). A pool was in front of each poster, and players had to decide in which lake fishing would likely be better, then would cast for a fish. Large fish won a large prize and so on.



Example 8-5: The Lake Game.

Ways to Show Data

This game can be easily modified to share the results of water quality monitoring: compare several lakes, each represented by a pool, or different sites from the same lake, or the same lake and site but in different years. Players decide where to fish, based on their sense of how water quality conditions affect the fishing (you might be kind and provide some helpful clues about the significance and impacts of different parameters).

Inquiring Minds Want to Know

Another interactive display idea is a take-off on something done by nature centers to engage children—although adults enjoy these too: draw your watershed, river, or lake on a large piece of plywood or foamboard. Be sure to add photos or other visual depictions of what the watershed is like at different locations—urban, rural, forested, cropland, etc. At sampling sites, represent monitoring results in graphic fashion—a smiling/sad fish, a picture, or a report card (“A”– “F”), but cover the result with a lid, piece of felt, or shutter. At the top of the board, frame a question such as “Where is it safe to swim in the Swift River?” or “Fish seek real estate in Long Pond” with a brief explanation of what makes the river safe for swimming or the lake excellent habitat for fish. Then invite the visitors to guess an answer and test themselves by lifting the covers.

Do it yourself data

Murals

The Somerville Arts Council cooked up a summer employment program for teens that combines hands-on environmental education with art. Schools were involved, with a science curriculum centered on adventurous exploration of the Mystic River Watershed, while a professional muralist directed teens as they created a visual representation of their experience with the river. This highly visible work raises awareness and appreciation for the river and its relation to the urban environment.



Example 8-6: Mystic River mural. (For more information on the mural project, see: www.somervilleartscouncil.org/programs/artwow/mural/index.html)

Ways to show data

Public awareness can be further enhanced in projects like this by mixing *data* with art. On an easily accessible spot next to the mural, a sign can be placed and regularly updated with water quality results.

Greeting cards

A school or club might also make greeting cards of attractive scenery or wildlife from your watershed. Inside or on the back, print a succinct message: "The Greenland High School samples the Fall River yearly and found an excess of bacteria due to urban runoff. For more information call 987-6543."

Poster contest

Organize a poster contest in the elementary schools, giving them the message to include (e.g. "Keep Crystal Lake clear: Plant Buffers") and mount a media campaign around it, using your data to document a problem or an outstanding resource. Make sure you have some prizes to give to the contest winners. Downtown businesses sometimes put the posters in their store windows for a short time, giving more coverage to your story.

Recycle that data!

A good display is too valuable to use just once. Spend a little time to book exhibits at alternate locations, and your efforts will pay off with increased exposure.

Tips for store fronts

- Just ask the store owner for permission!
- Anything drawn with markers will fade in the sunlight.
- Fishing line comes in handy to hang panels discreetly.
- Use 3-dimensional props.
- Put a panel with information on how people can contact you.
- Take it down within a month.

Storefront display

The Green River Watershed Preservation Alliance worked on an extensive display about the watershed to be exhibited in the Brattleboro Museum for a few weeks. When the exhibit was taken down, the portion on water quality was installed in an empty Greenfield store front, where it stayed a few more weeks. It was then loaned to several schools.



Example 8-7: Using an empty store front.

Tips for booking exhibits
(based on Sierra Club Acid Rain exhibit experience)

- Write an exhibit announcement flyer describing exhibit content, tips on how to display it, instructions on how to borrow it (include instructions on shipping if appropriate).
- Draft list of non-governmental organizations, museums, upcoming fairs, parks, libraries, and other possible venues. Mail flyer to them. Listings of upcoming events can be obtained from tourism offices, chambers of commerce, or from weekly newspapers that print seasonal events calendars.
- Follow up your mailing with phone calls!
- Create a packet with accompanying handouts, props, talking points for different venues. Ship this along with exhibit.

Acid Rain Exhibit

A few years ago, the Sierra Club developed an acid rain poster exhibit. This project is worth mentioning here for two reasons:

- The display itself used a creative mix of photos, diagrams, and text to achieve a combination of information, education, and persuasion messages;
- Club members hired an intern to book the display at numerous venues throughout the Northeast, which resulted in tremendous exposure for the exhibit.

The display consisted of eight panels which could either be placed on a table or on the floor, by affixing the panels to 6-foot high foam core boards with attached stands. Each panel contained information on a different aspect of acid rain: damage to human health, wildlife, property (cars, houses, statues) and to recreation. Data was presented primarily in the form of photodocumentation of these effects. The result was a highly visual, informative exhibit which made the case for action in compelling terms that could easily be grasped by people with a wide range of backgrounds and ages.

The intern in charge of booking the exhibit contacted dozens of prospective sites, assisted with the logistics of getting the exhibit from one place to another, and in some cases even offered help with pre-event publicity (see sidebar). Thanks to her efforts, the display was used at a number of museums, political rallies, national and state park visitor centers, environmental conferences, community fairs, and other venues. It's estimated that over 20,000 people saw the exhibit over the course of one summer and fall. You may not need to take the extra step of hiring someone to market your data presentations, but it does pay to focus some portion of your time and energy on bringing your exhibits and your audiences together.



Example 8-8: Acid Rain exhibit.

Wash and wear data

After a few years of monitoring the effects of acid precipitation in Massachusetts water bodies, the Acid Rain Monitoring Project was able to index every town in the state and color-code it according to its average sensitivity to acidification. A simple way to share these data was to print them on a color map. As a thank-you to the many volunteers who collected and analyzed samples for the project, the map was simplified and cartoonized, and printed on the back of T-shirts which were given to the volunteers. When wearing the shirt, volunteers frequently had to stop and let friends and strangers alike find their town on the map to find out whether they lived in a danger, caution, or OK area. Clearly, this is not feasible for data that changes frequently, but it worked fine for the 5-year averages depicted on the shirts.

On a per-unit basis, this is not a cheap way to present data (\$4 to \$10 a shirt, depending on the quantity you are ordering), but if you were going to give members a T-shirt anyway, it's a clever way to accomplish two things at once.

Example 8-9: T-shirt data.
