

---

12-1995

## Research Note: Sandra Clark

Follow this and additional works at: [https://vc.bridgew.edu/br\\_rev](https://vc.bridgew.edu/br_rev)

---

### Recommended Citation

(1995). Research Note: Sandra Clark. *Bridgewater Review*, 14(2), 32.  
Available at: [https://vc.bridgew.edu/br\\_rev/vol14/iss2/17](https://vc.bridgew.edu/br_rev/vol14/iss2/17)

This item is available as part of Virtual Commons, the open-access institutional repository of Bridgewater State University, Bridgewater, Massachusetts.

## FACULTY RESEARCH NOTE

### Sandra Clark

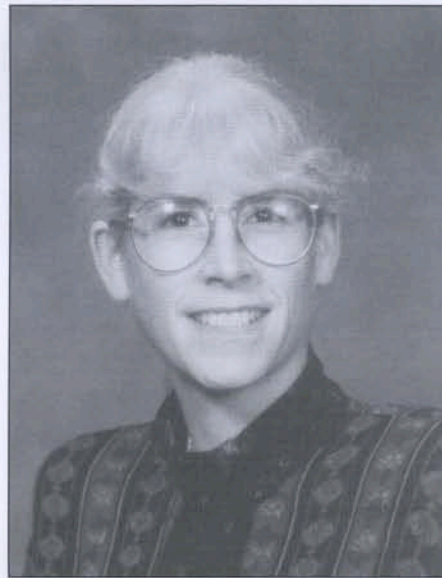
**S**andra Clark is the fluvial geomorphologist in the College's Earth Science and Geography Department. Now in layman's terms that means that Professor Clark is the resident expert on rivers. Even more precisely, Professor Clark's interest is to study the impact of humans on our rivers and in return to examine the impact of rivers on humans. Her work is increasingly important not only in terms of protecting a valuable resource, but also as a way of better understanding the connection between rivers and a range of health issues.

Professor Clark is an articulate and passionate spokesperson for the study of America's rivers and river systems. She is currently immersed in research on the Colorado River and its tributaries. Her work is designed to expand the available scientific data on how metals and trace elements are associated with medical problems found in humans and animals in the regions that border the Colorado.

Professor Clark is especially interested in studying the health impacts of the trace metal selenium, which can be found in the water of the Colorado and in the river sediment. Although selenium is currently

being touted by some for its anti-cancer properties, there is also strong evidence that it can be hazardous; bringing on respiratory problems and eventually death. Also livestock in western states have for years been susceptible to "locoweed," which sucks up the selenium in the soil and creates a toxin that leads to eye problems and joint dysfunction (the primary reason the cattle often seem to be stumbling around).

During the summers Professor Clark can be found in the remote reaches of Arizona, Utah and Colorado gathering water and sediment samples and testing those samples to determine the level of metals and trace elements such as selenium. Her work is partially funded by the National Geographic Society with some help from



The National Science Foundation but she also finds it necessary on many occasions to rely on her own resources. Since research on the relationship between trace "metalloids" like selenium and health issues is of necessity long term, Professor Clark expects to be traveling out West for the next three to five years or more.

Although Professor Clark has focused on her research in the West (where she received her Ph.D. from Arizona State University), she is also a keen observer of rivers here in New England. She is impressed with the general health of our rivers and river systems. She notes that there has been great improvement in our inland waterways in large part due to public consciousness of environmental protection. Numerous watershed organizations have sprung up in New England in recent years with the express purpose of enhancing the quality of our rivers.

Sandra Clark, the fluvial geomorphologist, is also Sandra Clark the classroom instructor. Just as she is articulate and passionate about her research, she is also articulate and passionate about introducing her students to the wonders of the world they live in. Professor Clark believes firmly that her students should get out of the classroom and see the rivers and shorelines and rock formations that they are studying at Bridgewater. She has thus arranged a number of field experiences that have taken her students to Cape Cod to examine the changing character of shorelines and, following the example of the other energetic members of the Earth Science and Geography Department, to Lowell to see how the Merrimack River was harnessed for industrial and commercial purposes.

Sandra Clark intends to build on both her research and her classroom teaching in the coming years. She is deeply committed to giving back something to our planet and sees her work with rivers and their interrelationship with humans as one way of preserving our planet.