...if we are going to have a new connection to the environment it will have to happen in individual hearts and souls... the artist can help us fall in love with the earth again.

Berensohn 2002

Emotions play a central role in the decisions we make. For example, we often make poor investment choices because we are driven by our emotions rather than rational judgment (Tversky & Kahneman 1991). On the positive side, when emotional input is added to learning experiences, it makes them more memorable and exciting. The brain deems the information more important and enhances memory of the event. Presenting facts alone is less likely to result in long-term changes in feelings and behaviors (Sylwester 1994; Weiss 2000; Cable & Ernst 2003).

The arts offer a way to make an emotional connection to people, and the visual and performing arts can help conservation practitioners reach new audiences. Art can provoke reactions that typical education and outreach methods do not. Art has the potential to inform audiences or participants in a new way about conservation topics, and it can stimulate new dialogues and actions.

By engaging multiple senses and emphasizing social interaction, the arts can provide people with emotional pleasure and support (Levinthal 1988). Medical practitioners find that incorporating movement, sound, art, and journal writing into their therapeutic practices helped patients identify feelings, explore unconscious material, gain insight, and solve problems (Rogers 1993). Writing and reading poems helped medical students better understand a sick patient’s feelings and their own relationship to disease and healing (Grace 2004). Applying these principles to conservation issues could foster closer relationships with nature and more creative solutions to problems.

Ideally, conservation education and outreach promotes interdisciplinary understanding of the natural and built environment through the sciences, arts, and humanities. The theory of multiple intelligences suggests that educators should incorporate more integrated skill sets, including musical and kinesthetic intelligences, into activities to enhance learning (Gardner 1999). Using complementary intelligences in conservation education would foster environmental literacy for a greater variety of people. Yet conservation educators often focus solely on technical dissemination of scientific information and overlook other ways of understanding the world (Turner & Freedman 2004). This technocentric approach may not incite people to reflect on their values or personal behaviors (Job 1996) or inspire people to engage in sustainable land-use or consumption patterns.

Use of the arts is an important yet little-studied strategy for effective conservation outreach. We describe several examples that provide evidence of how the arts can stir emotions and attract new audiences, increase awareness, improve classroom instruction, introduce new perspectives, and foster environmental stewardship. Encouraging a variety of ways of understanding the world should result in better care of it.

Performing Arts Improve Learning and Reflection

Music should play a role in conservation education because of its ability to attract attention and invoke emotional responses. Listening to music can elevate endorphin levels, creating a feeling of pleasure (Levinthal 1988). Educators may use a number of different techniques to integrate music into a classroom or outreach program. Many popular singers have recorded songs that describe environmental problems. When listening to music, audiences can listen for key words, follow along with a lyrics sheet, or accompany the music with physical actions and sound effects. The emotional and creative activity of listening to, singing, or acting/reacting to a song helps stimulate the audience to learn (Orleans 2004; Turner & Freedman 2004).

A group of Canadian teachers and musicians created a CD entitled Passengers, with songs about conservation that included aspects of the elementary environmental science curriculum. This integration of science themes with music allowed students to have fun singing while rehearsing the learner outcomes specified in their curriculum. Teachers
were happy to check off their subject requirements; students derived additional benefits of a group singing experience, such as boosted self-esteem, increased confidence, and social connection with others (Lenton 2002).

In many cultures songs are a traditional way to pass on stories. They have been used to build awareness about a variety of environmental problems. In Tripoli, Lebanon, a campaign to improve the disposal of solid waste made use of a catchy jingle. A planning assessment revealed that people throw their waste on the streets and out their windows. The municipality wanted residents to bag their waste and place it in cans for collection. A song addressed to housewives, who often listen to the radio, was broadcast on many stations. The song repeated simple slogans to prompt compliance, such as: “Good morning Madame, the cleanliness of your house goes well with the cleanliness of your street.” A catchy melody made the message hard to forget and helped increase compliance (Mehers 2000).

Theater can help bridge social divisions and bring people together to address environmental problems. A dramatic performance of The Plague and the Moonflower was staged in Armidale, Australia, to raise awareness about environmental degradation and the need for people to practice more sustainable behaviors. The pageant involved 170 performers and crew and combined music, drama, and poetry to portray a story of the destruction and protection of nature (Curtis 2003). In-depth interviews were conducted after the performance to determine impacts. Results indicated that audience members could identify the environmental message of the work and reported a greater appreciation of their community (Curtis 2003). The event also expanded the audience for environmental awareness. Many audience members were regular concert-goers, not people necessarily attracted to environmental content. The musicians reported the performance caused them to think more deeply about environmental issues. Subsequent behavioral changes by audience members were not measured, but a number of respondents mentioned they were reexamining how their consumer choices affected their environment. Many families may find participating in the performing arts more appealing than joining an environmental group.

Environmental Writing Awakens Feelings for Place

Writers arouse emotions and enhance people’s appreciation for nature. Writers can contribute to public understanding of the connections between people and a healthy environment. The Long-Term Ecological Reflections project invites authors to “translate” forest restoration activities at Andrews Forest in Oregon into new metaphors and experiences for readers. “What is a forest?” asks project director Kathleen Moore. “Is it a commodity? . . . The answers have practical importance for those who design forest policies in a complex and changing social context” (Bazilchuk 2006).

Both reading and writing about the environment promotes reflection about our role in the world. Students who kept journals about a favorite place provide evidence that the journal-keeping process influences a person’s affection for a piece of land. A comparison of journal entries made at the beginning and end of a course showed the development of greater understanding and care for the chosen landscape (Rous 2000).

An international nonprofit organization, River of Words, combines the use of poetry and art with observation-based nature exploration to excite youth about watersheds. River of Words conducts training workshops for teachers, park naturalists, community groups, and resource agencies on the use of this multidisciplinary, hands-on approach. The program targets children’s literacy, critical thinking skills, and creativity. Participants engage in outdoor activities to explore their watersheds and enter an annual environmental poetry and art contest. In 2004 River of Words received over 20,000 entries from around the world. The poetry and art portions of the curriculum help make the science relevant and personal. After studying a spider’s web, an 11-year-old transformed his observation into a poem: “Dawn’s reflection/honeycomb of light/bound by diamonds/caught overnight” (Pardee 2005). The River of Words program has resulted in community partnerships in support of education and watersheds, creek clean-ups and restorations, and environmental poetry clubs and art exhibitions (River of Words 2005).

Visual Arts Attract New Audiences and Facilitate Dialog

Environmental organizations often use art exhibits to raise funds and stimulate social interaction. Art exhibits can go beyond this by engaging audiences in contemplating new perspectives about the environment. An art exhibition allowed forestry extension faculty at Oregon State University to communicate with new audiences about forest management. Extension agents were accustomed to talking with traditional clientele, such as forest landowners, but had little experience with an urbanized public that was becoming more involved in natural resource policy debates in the Northwest. To reach this audience, extension foresters used a traveling art exhibit to engage the public in a discourse about forestry (Withrow-Robinson et al. 2002). The extension team selected 10 issues to illustrate the scope and complexity of regional forestry concerns, including wildlife habitat, aesthetic beauty, harvest methods, jobs, forest health, recreational use, water resources, fire
management, conflict resolution, and urban sprawl.

More than 65,000 people viewed “Seeing the Forest” in six Oregon communities. The main communication was through the 53 pieces of art. Comment cards were tacked to corkboards to allow visitors to share feedback with other viewers and to stimulate a dialog in this informal setting. Comments such as “Our forests are really valuable, and it’s important that we do care. They are a renewable resource, but it takes a long time to grow one tree. It’s important that we don’t get careless” stimulated a range of other responses. An evaluation survey completed by 365 viewers revealed 85% of respondents thought the art show successfully illustrated the diversity of forest issues in Oregon, and 77% agreed that viewing the show increased their understanding of the complexity of forest issues (Withrow-Robinson et al. 2002).

Participating in an art event can go beyond making people more open to information or supportive of an organization or a cause. It can stimulate changes in proenvironmental behavior, such as the stewardship of a natural area. Japanese artist Tadashi Tonoshiki worked with over 100 residents of Niinohama to collect litter that had washed up on a beach, some of which was incorporated into his art piece. The artist’s “ecological action art” stimulated participation in a beach cleanup by people who may not have gotten involved otherwise. The director of the International Friends of Transformative Art recognized the emotional power of art: “Certainly we still need to act politically—we can demonstrate and march and write letters to Congress. But art is unique—it has a certain power, an interaction with our consciousness in a way that we might not even understand yet” (Cembalist 1991).

Finally, participating in the visual arts can engage the audience as artists. A program developed by The Nature Conservancy (TNC) and the New York Foundation for the Arts—Wild New York: Creating a Field Guide for Urban Environments—aimed to increase awareness of urban ecology through a hands-on art experience (TNC & New York Foundation for the Arts. Presented at the 2004 Society for Conservation Biology annual meeting, New York). The format was a series of four field trips to different parks around New York City. Naturalists and an artist guide accompanied participants, explained ecological phenomena, and introduced a new art project at each site, such as leaf prints, sun prints, and water colors. A final meeting allowed participants to piece together their art creations into a “guidebook.” By creating art from their experience in nature, the participants could address urban environmental issues in a creative way that would capture the attention of people that might otherwise be unconcerned. Project leaders conducted a written before-and-after survey to assess changes in participants’ perceptions. At the end of the project all participants reported that they viewed natural environments differently and will visit natural areas more often. The program helped introduce TNC to new audiences that had never attended their traditional nature walks or conservation lecture programs.

Conclusion

Music is sugarcoating for the truth pill. It reaches the heart, and usually the heart is more open to new ideas than the mind.

Darryl Cherney, Music Producer (cited in Jacobson 1999)

All of the art programs we reviewed here suggest that promoting conservation through the arts may reach a more diverse audience and reach them more successfully by engaging their hearts as well as minds. This requires collaborating with artists and the art community, audiences with whom scientists and educators may seldom interact. Implementing programs involving the arts may take a few people or a cast of hundreds. To be effective outreach with the arts must be carefully planned—partnerships with artists formed, audiences identified, and desired responses integrated with conservation objectives. The purpose of the activity should be clear, whether it is to attract new audiences, increase awareness, introduce new perspectives, create a dialog among diverse people, or reinforce a behavior (Jacobson et al. 2006). More research is critically needed on the type of active or passive art experiences that stimulate changes in environmental behaviors, make participants more open to information, or engage their positive feelings in support of a cause. Better measurement of outcomes would provide accountability and allow identification of the specific role the arts can play in conservation. Conservation problems require creative solutions. Accessing multiple ways of knowing and caring about the world should help us to conserve it.

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