

Day. It is no secret that the two versions are quite different, with the Disney release marked by several cuts, and that some of the sponsoring organizations had their affiliations removed from the American version.

In one omitted scene, a young boy and an older man walk through a natural history museum of extinct marine animals. Another missing scene shows them standing in front of an admittedly beautiful aquarium exhibit while the narrator remarks “but if this is all there was it would be ... a sad reflection of the real world” we are destroying. The suspicious may see the deletion of this touching scene as an egregious act of corporate self-interest (Disney being a big player in the marine theme park biz).

In the U.S. version, Pierce Brosnan drones on with an insipid narration, full of platitudes and often unwarranted optimism. The more powerful original has little narration and leaves the viewer undisturbed to experience the beauty of the oceans without being told

Océans

Jacques Perrin and Jacques Cluzaud, directors

Galatée Films, France, 2009.
100 minutes.
www.oceans-lefilm.com/

Oceans

Jacques Perrin and Jacques Cluzaud, directors

DisneyNature, USA, 2010.
87 minutes. <http://disney.go.com/disneynature/oceans/>



what to think. The worst transgression of all may occur in an unlikely place: the credit roll. In the original, a thoughtful warning about the state of the globe from the older man and his young companion dissolves into the credits. These roll to a slow and pensive ballad while haunting footage, mostly from earlier scenes, maintains the sense of humility appropriate to thinking about the oceans and what we are doing to them. In the Disney version, a nonsensical upbeat derivative rock song, “Make a Wave,” accompanies shots of the cameramen and others actually making the movie—as if the whole thing were just some more Hollywood pretend.

Now it may be that once Disney becomes a film’s American distributor, one has to expect concessions for the children who will now be the target audience. And perhaps a case can be made that getting to young children and making them environmentally conscious will serve an important future function. But public policy about the environment is being decided now by adults who are uninformed or misinformed—not by children who in 30 years might feel good about the oceans because they saw this movie when they were 8.

To me, a larger question is why there is no adult market in the United States for an environmentally sensitive and demanding film with an informed and important scientific message. Did potential American distributors turn down Amenábar’s star-filled, award-winning, historical action film because it had a cogent scientific theme? Why are films like *Océans* and *Agora* finding strong, sophisticated, adult audiences in Europe and failing to attract attention in America?

10.1126/science.1192783

FILM: ENVIRONMENT

Takes on Hunters and Roads

Once again, we took advantage of the annual Environmental Film Festival in the Nation’s Capital to sample movies that “celebrate the wonder of the natural world and illuminate the growing challenges to life on Earth.” This year’s festival (the 18th) featured 155 films, many of which explored links between our foods and the environment. Some works addressed the ecological implications of various human activities; others focused on green practices and potential solutions to the problems we face. A few—

such as the four-part *Rauta–Aika (The Age of Iron)* (1982), filmed from poet Paavo Haavikko’s interpretation of the Finnish national epic, *Kalevala*—seemed hard to link to the environment under even the most inclusive approach. The screenings were often enhanced through discussions with the filmmakers and involved experts and activists. Brief descriptions of all of the films can be found at www.dcenvironmentalfilmfest.org/films.php. Here are comments on several that we managed to catch.

Lords of Nature: Life in a Land of Great Predators. Karen Anspacher-Meyer and Ralf Meyer, directors. Green Fire Productions, USA, 2009. 60 minutes. www.lordsofnature.org

The early-20th-century extirpation of wolves from Yellowstone National Park was followed by pronounced changes in vegetation. Elk browsing on young trees had a drastic impact on willow, cottonwood, and aspen. After wolves were reintroduced to Yellowstone in the 1990s, recruitment of these trees rebounded (elk became more skittish and shifted their feeding habits). The wolves also had other effects: their kills supported more scavengers; beaver recolonized streams, feeding on the flourishing willows; pronghorn lost fewer calves to coyote; reestablished streamside vegetation retarded erosion and provided cover for birds, fish, and invertebrates. Yellowstone serves as the film’s prime example of the ecological importance of top predators, and the Meyers highlight research carried out there by Bill Ripple and Bob Beschta. *Lords of Nature* follows the scientists to Zion National Park, where they record data on the similar effects of cougars on ecological diversity and resilience.

Recognizing that the large predators can only persist when they are tolerated by humans, the filmmakers visited livestock producers in Minnesota (home to more wolves than any state except Alaska) and Idaho. These cattle farmers and sheepherders describe nonlethal approaches (such as trained guard dogs, fencing flocks at night, and spooking predators) that they have successfully used to reduce their losses to (and conflict with) wolves.

The film returns several times to the experiences and reflections of wildlife biologist Aldo Leopold. While working for the Forest Service, he had helped



eradicate wolves from New Mexico. In wolf-free Wisconsin, he witnessed the effects of overabundant deer. And through his classic conservation writings he argued for a land ethic that preserved the integrity and stability of biotic communities, including their crucial predators. As Meyer and Meyer intended, *Lords of Nature* should motivate viewers to help us achieve Leopold's goals.

—Sherman J. Suter

Seed Hunter. Sally Ingleton, director. 360 Degree Films, Australia. 2008. 59 minutes. www.seedhunter.com

Despite some hyperbole (e.g., Australian scientist Ken Street as “the Indiana Jones of agriculture”), Ingleton has put together an appealing and informative adventure story. Street and an international team travel the world collecting “ancient” seeds to use in breeding new crop strains. The rationale is that modern crops have been selected for certain qualities (such as rapid growth or good taste) but may not be able to withstand changes in temperature, moisture, and pathogens that accompany climate change. Varieties that were never (or are no longer) cultivated could harbor genes that will be important for future agriculture. Journeying to remote parts of Tajikistan, the team collects an assortment of seeds and searches for the wild chickpea, which Street describes as “poor man’s meat.” One problem they encounter is that well-meaning aid workers have distributed modern seed strains to



poor farmers and many older varieties have already disappeared. They eventually locate cautious farmers who had held on to their old seeds (wheat, barley, and others) and even find their “Holy Grail,” the wild chickpea. The final scenes show Street depositing seeds for safekeeping in the gene bank at Svalbard and presenting some drought-resistant seed to a farmer in Syria whose wheat crops have failed for lack of rain.

—Barbara Jasny

The Last Days of Shishmaref.

Jan Louter, director. Miroir Film, Netherlands. 2008. 91 minutes. www.thelastdaysofshishmaref.com

Many of the Inupiaq who live in Shishmaref, an Alaskan village just north of the Bering Strait, are hunter-gatherers, for whom caribou, walrus, and seal serve as primary food sources. Louter’s depiction of their subsistence lifestyle under normal circumstances is stark and definitely not prettified. Howling dogs and roaring winds are repeated elements in the film. Villagers chop ice for water (there are no water or sewer lines), and they deplore the fact that the government ignores their requests for assistance. Although they carve whalebone and ivory, the filmmaker shows them as hanging on to life rather than as artists. Nonetheless, interviews with families make clear that this is the place and the way of life they have chosen. Now they find they may lose the little they do have as a result of climate change. Rising temperatures are thawing the permafrost beneath the village, leading to increased erosion and greater vulnerability to storm surges. As homes collapse into the sea, the villagers face evacuation further inland. In a surreal scene, one family huddles around a television watching a special news program explain that the village will disappear within 10 years. *The Last Days of Shishmaref* is not uplifting, but it is a poignant film.

—Barbara Jasny



A Road Not Taken. Christina Hemauer and Roman Keller, directors. Switzerland, 2010. 66 minutes. www.roadnottaken.info/

In 1979, Jimmy Carter installed solar panels on the roof of the White House. Seven years later, Ronald Reagan had them dismantled. Unity College, Maine, later refurbished 16 and used some of them on its cafeteria. Hemauer and Keller’s documentary follows up on their fate. The filmmakers



journey from Maine (where many panels remain in a barn), to Washington, DC (where a lack of paperwork initially precludes donating a panel to the Smithsonian Institution), to Georgia (Carter’s presidential library), and back to Washington (where the National Museum of American History formally

accepts a panel). Interspersed interviews and film clips fill in some historical details and suggest current perspectives.

A Road Not Taken clearly delivers its principal message, that the United States moved away from the national conservation policy and development of alternative energy sources that Carter desired. However, by relying mainly on unplanned actions and uninformed interviews, the narrative sags. More coverage of the decision to remove the panels would have been interesting. Or the movie might have gone further into some of the themes it hints at, such as connections between energy and the conflicts in Iraq and Afghanistan, recent progress toward Carter’s goals, and how we might jump from our current path to a greener one.

—Laura Zahn

Division Street. Eric Bendick, director. Frogpondia Films, USA, 2009. 53 minutes.

The landscape of the United States has been carved up by a surface transportation network that includes some 6.5 million km of roadways. The farthest one can roam from a road in the contiguous 48 states is 35 km.

With two friends, Bendick embarked on a backpacking trip to that most remote site, a hillside in the Thorofare valley of Yellowstone National Park. *Division Street* interweaves scenes and scenery from their wilderness pilgrimage with considerations of the undesired effects of highways and of some of the approaches being taken to mitigate those. Collisions flatten fauna and occasionally kill people. Roadways form barriers that fragment habitats, thus increasing the rate of loss of local populations. The film showcases the provision of wildlife corridors under or above the roadbed that allow animals to avoid traffic—offering examples from the Canadian Rockies, a Montana Indian reservation, and Florida.

Other segments of the film touch on urban sprawl, city planning, and “green transportation.” Bendick effectively presents the perspectives of people who are trying to reshape our highways in order “to save the remaining wild places in between them.”

—Sherman J. Suter



10.1126/science.1191554

CREDITS (TOP TO BOTTOM): HEMAUER & KELLER; SALLY INGLETON; MIROIR FILM; FROGPONDIA FILMS