

FILM: ENVIRONMENT

Seeing Green on the Silver Screen

In March, the 16th annual Environmental Film Festival in the Nation's Capital brought 115 movies—documentaries, features, animations, shorts, and children's films—to Washington, DC. Here are our reviewers' reactions to five of them.



Most Dangerous Catch. David Elisco, Director. Sea Studios, Monterey, CA. 2008. 57 minutes. National Geographic's *Strange Days on Planet Earth*.

"Follow a fish and you can end up in some unexpected places," says actor Edward Norton at the beginning of a new episode of *Strange Days on Planet Earth*. The show explores two indirect effects of overfishing that are both surprising and dramatic (although one is highly speculative). Along the way, it provides an entertaining view of how scientists stumble into mysteries and then solve them. Twice it proves the point that archives can be places of important discovery.

Throughout, Norton offers commentary that is intelligent, if sometimes stilted and breathless. The real star is Justin Brashares, a young ecologist who went to Ghana in the 1990s to study antelope and was struck by their scarcity. After hearing a lecture by a former government official about the importance of marine fish throughout the national economy, Brashares and his colleagues studied rural markets and found a striking correlation: When fish are scarce, more bushmeat is for sale []. S. Brashares *et al.*, *Science* **306**, 1180 (2004)]. Research in the archives of Mole National Park revealed that a long-term decline in 41 African species matches the decline of the fishery in the Gulf of Guinea. One note to viewers: although a booming population of marauding baboons hikes the tension, the connection to overfishing isn't clear in the show. In fact, Brashares's baboon numbers have increased because their predators have been hunted.

The show then cuts to the coast of Namibia, where Bronwen Currie works for the Ministry of Fisheries. She is surprised when her town is fouled by the stench of rotten eggs and dead fish wash up on the beach as in a horror movie. (This is just one of several instances when the film lapses into juvenile cinematography.) Currie searches through local records and finds past mass kills, then teams up with oceanographers. They discover the role of hydrogen sulfide from rotting phytoplankton, as well as explosive releases of methane. Satellites capture a fish kill in action, stretching up the coast for hundreds of kilometers [S. J. Weeks, B. Currie, A. Bakun, *Nature* **415**, 493 (2002)]. By then, I was wondering what this story has to do with overfishing. Andrew Bakun, an oceanographer at Namibia's National Marine Research and Information Center, proposes that the massive overfishing of sardines has led to a surfeit of phytoplankton, perhaps increasing the frequency of the submarine eruptions. That conclusion feels tenuous, as does Bakun's suggestion that overfishing may be contributing to global warming, but the story of the discovery is well told.

So much for the unexpected problems caused by fishing. The last third of the show races through several attempts to relieve the pressure, including marine reserves in California and more ecologically benign approaches to aquaculture. After the two narratives, this part seems jam-packed and rushed. These are worthy, but not unexpected, places to end up. Perhaps a lesson from the fishing industry would have helped: less can be more. —Erik Stokstad

FLOW: For Love of Water. Irena Salina, Director. Water Project, USA. 2008. 93 minutes. www.flowthefilm.com

In Cochabamba, Bolivia, soldiers in riot gear fire tear gas into crowds hurling rocks and stones in a fight over access to clean water. Such access, Irena Salina's film *FLOW: For Love of Water* tells us, will become a major political

and economic flash point in the 21st century. The film's two principal themes—affordable access to clean water and "ownership" of water rights—take us into the heart of towns and villages in India, South Africa, the United States, and the aforementioned Bolivia, where the first skirmishes in the latest water wars are taking place. On affordable access to clean water, the film's message is clear: many rural solutions can be low-tech and local, putting control of water resources directly in the hands of the people who use them. Salina approaches ownership of water rights mainly through the proxy of a protracted legal dispute between concerned citizens and a Nestlé water bottling plant in Stanwood, Michigan. Here the message is muddled, as we learn



little of what reasonable limits on water harvesting activities might be.

The film's strength is its passionate call to arms to those concerned about the global trend in privatization of water treatment and delivery systems and with the potential consequences for the poorest and most vulnerable members of society. The intimate connection Salina gives us with the women sitting in silent protest outside a Coca-Cola bottling plant in Plachimada, India, is both moving and motivating. Indeed, throughout the documentary, determined individuals and local communities are seen pitted against "villainous" multinational water and bottling companies (Thames Water, Vivendi, Suez, Coca-Cola, Nestlé, etc.) and the World Bank (one of whose number I am married to). Yet, with this relentless portrayal of multinationals (in connivance with the World Bank) as heartless profiteers, an opportunity is missed to both nuance the arguments—how water can be provided equitably in ever-expanding urban areas in the developing world—and engage the "enemy" in a more constructive, and ultimately productive, dialogue.

—Guy Riddihough

Building the Future—Energy. Nicolas Brown, Director. UK. 2007. 54 minutes.

In *Building the Future—Energy*, Nicolas Brown provides vignettes of projects aimed at new, sustainable energy sources and the challenges faced by the individuals (described as heroes) working on them. Although frozen methane brings to mind the moons of Jupiter, investigators are diving in search of underwater fissures close to outcrops of gas hydrates. They believe that there could be enough such methane under the Gulf of Mexico to power the United States for years if it can be extracted safely.

Next, the film describes the hazards involved in building the Netherlands' first off-shore wind farm, at Egmond aan Zee. It compares assembling blades half the size of a football field and their platforms in the

midst of the North Sea to balancing a semi-truck on four basketballs.

The film then turns to a place not known for high winds: Roosevelt Island, adjacent to Manhattan. In 2007, Verdant Power and the New York State Research and Development Authority conducted an experiment to see whether the tides of the East River could be harnessed to provide electricity for a grocery store, with the dream of eventually using tides to provide as much as 10% of the power needed by New York City. Although the potential is great, strong tides have destroyed underwater turbine blades, and the effects of such turbines on the ecosystem remain to be fully explored

Others are focusing on the Sun's power. Brown highlights Roger Davey of EnviroMission, whose goal has been to build a commercial solar-thermal power plant in Australia (where there are 300 or more days of sunshine a year). In the United Kingdom, the Joint European Torus is re-creating the power of the sun in a large fusion reactor. It is clean energy (no radioactivity) but a risky process that could take decades to develop.

This unabashedly upbeat film offers an antidote for anyone afflicted with a sense of fatalism about the future of clean energy.

—Barbara Jasny

Gimme Green. Isaac Brown and Eric Flagg, Directors. Jellyfish Smack, USA. 2006. 27 minutes. www.gimmegreen.com

The ubiquitous American lawn is a facade requiring the use of scarce water resources and the application of carcinogenic chemicals. At least that is the image presented in Isaac Brown and Eric Flagg's documentary *Gimme Green*. The film offers a scattered look at the pros (mainly aesthetics) and cons (the work, pesticides, and water use) of having a well-maintained lawn.

Brown and Flagg note that in the early 20th century most people didn't own their home and there were no yards. With home ownership, they imply, came community standards for tidy turf. They interview several people who suggest that unkempt yards mark less-community-minded individuals and who pass judgments on those lacking neat lawns. The film shows the absurdity to which some take this standard and how the desire for green leads to the use of water that we can't spare. It also touches on the potential risks of the insecticides and herbicides used to treat lawns, commenting that children living in homes with treated lawns are more likely to develop leukemia and that some of these chemicals are carcinogens that have made their way into our groundwater. These facts are presented (without referencing sources) as



breaks between interviews.

Lighthearted and fun, the film races along making its main, rather depressing, points about why we should consider other ways to decorate our properties. Unfortunately, it presents few such alternatives—and those all too quickly: a brief scene touching on the natural look, a short scan of books on gardening with native plants, and a presentation of artificial turf as a substitute. The filmmakers de-

monstrate an aptitude for the style of other recent documentaries that entertain while informing. *Gimme Green* skewers a familiar aspect of our lives and, hopefully, forces the audience to rethink their obsession with turf.

—Laura M. Zahn

Scarred Lands and Wounded Lives: The Environmental Footprint of War.

Alice Day and Lincoln Day, Directors. Video Takes, USA. 2008. 60 minutes. www.fundforsustainabletomorrows.org/film.htm

I began watching *Scarred Lands and Wounded Lives* with some skepticism—if the world fails to act to prevent the deaths of men, women, and children during war, will it pay any attention to a discussion of the accompanying damage to the Earth? However, the extensive research and skillful presentation by sociologists Alice and Lincoln Day make the film a surprisingly moving experience. Interviews of scientists, war veterans, and others are carefully interspersed with footage that makes vivid the long-term damage to the planet that has resulted from military conflicts and activities: e.g., cluster-bombs from as long ago as the Vietnam War that are still killing children and hindering efforts to restore agriculture, possibly toxic seepage from the more than 4000 ships sunk near South Pacific reefs during World War II, war-related deforestation in such places as Afghanistan and Vietnam, and contamination by radioactive wastes associated with nuclear weapons in many parts of the world. The filmmakers also address other themes such as the limited ability of ecosystems to survive damages caused by military actions, the extent to which problems could be addressed if resources were not being diverted to planned and ongoing wars, and the need to transition to environmental sustainability.

—Barbara Jasny

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