

THE OREGON EXPERIENCE--FOUR YEARS LATER

Judie Neilson*
Oregon Department of Fish and Wildlife
Portland, Oregon 97207, U.S.A.

*Present name and address: Judie Hansen, 1502 S. County Road 525W,
Danville, IN 46122.

ABSTRACT

The fifth annual Oregon coastwide cleanup, held 10 October 1988, attracted 2,200 volunteers who collected 14.2 tons of debris. Similar fall cleanups were held in 22 coastal states of the United States, Costa Rica, and Puerto Rico. This paper reviews personal observations about the effectiveness of volunteer beach cleanups and discusses the evolution of data gathering, media coverage of the marine debris problem, changes in attitudes, and advancement in plastic recycling.

I am pleased to be here to share my knowledge on my favorite subject-- "floatable trash." I became interested in this subject just 5 years ago. At the time, it was a challenge to find information on the subject at all. Let me tell you how I became involved.

In 1984, the May-June issue of the Alaska Fish and Game Department's magazine was delivered to my office by mistake. Flipping through it, I was drawn to an article by free-lance writer Tom Paul. Entitled "The plague of plastics," it discussed the proliferation of plastic debris in the natural environment and the resulting ingestion and entanglement by fish and wildlife.

At the time, I had worked at the Oregon Department of Fish and Wildlife for 10 years and been an active birdwatcher for 25 years. I knew birds got entangled in monofilament fishing line and six-pack beverage rings, but I didn't know they had an appetite for polystyrene foam and small bits of plastic.

In talking to birdwatchers, scientists, and friends, I realized others were also unaware of the problem. Since 1984 was the "Year of the Ocean" and we Oregonians love our coast, I had the idea to organize a cleanup of plastic debris on our 563 km (350 mi) of coast to see what we could find.

I put together a small working group; we divided our coast into 14 zones and found people willing to serve as "zone captains." The captains were biologists from the Department of Fish and Wildlife and local residents of the coastal communities. Zone captains coordinate refreshments for celebration parties, assign volunteers to specific stretches of beach, arrange for the pickup of the collected debris, and work with the news media.

We spread the word of that first cleanup and invited the public to the coast to see how much marine debris we could collect on the 241 km (150 mi) of accessible beach.

Saturday, 13 October, was a very cold, wet, dark, blustery day. To my amazement, 2,100 volunteers showed up and collected 26.3 tons of debris in just 3 h. They filled out questionnaires documenting the quantity of fishing gear, six-pack yokes, polystyrene foam, plastic bags and bottles, rope, and strapping bands. We recorded the event on video film and produced a 12-min film entitled "Get the Drift."

Word of the cleanup spread quickly, and that November I was invited to report the results at the Workshop on the Fate and Impact of Marine Debris in Honolulu, Hawaii. Those attending were government scientists and concerned citizens from around the world working on marine mammal entanglement problems. I felt like an imposter with my citizen involvement project results, but the scientists welcomed me with open arms. They came up to me afterwards and thanked me for documenting the volume of trash in a large given area. Many had wanted to do beach surveys for years but were unable to spend time and money on that kind of research.

A number of recommendations came out of the workshop, and one was that beach cleanups are a valid way to document the amount and sources of marine debris. As a result, I was asked to organize and report on the findings of cleanups along the west coast and New England states in 1985.

I prepared the "Nuts and Bolts Guide to Organizing a Beach Cleanup the Easy Way." A "Dear Coastal Colleague" letter was mailed to over 200 organizations and government entities listed in the National Wildlife Federation Conservation Directory. They were asked to take an active part in organizing a cleanup in the study area states. Firm commitments were received from eight states.

State coordinators were mailed a copy of the Nuts and Bolts Guide as a "starter kit" but were encouraged to use special creativity to organize the cleanups. Some interesting logos, posters, and mottos resulted: "Lend a hand in the sand," "Don't be a litter boat," "Be a beach buddy," and "Debris-a-thon," to name a few. The main focus of the national cleanup was to determine the amount of derelict fishing gear, both sport and commercial, which makes its way to the coastal beaches, and to help educate the public.

Following the cleanups, I compiled the results in a report to the U.S. National Marine Fisheries Service.

The coastal cleanup program has grown by leaps and bounds. In 1986, we had 14 states participating. In 1987, there were 19 states. During September and October of 1988, all 22 coastal states, 7 inland states, and Costa Rica and Puerto Rico participated. All of the cleanups were held during Coastweeks, produced by a citizens' network of groups, agencies, and individuals who focus attention on that special place where water meets the land. During the period of Coastweeks, agencies and organizations in coastal states have beach walks, bird identification seminars, beach cleanups, and various activities to call attention to coastal issues. Five years ago it was simply Coastweek, but to accommodate the many states participating, with different weather and tide patterns, the annual campaign now stretches from the middle of September to the middle of October.

So after five cleanups, what are my thoughts about this whole business? I feel the number one value of beach cleanups is raising public awareness. Almost to a person the volunteers remark, "I never realized how much stuff was out there until I had to spend time leaning over to pick it up." And it sticks with them when they go back home. One friend told me that after working on a beach cleanup he couldn't enjoy playing golf because he kept seeing all the polystyrene cups in the ponds on the golf course. In areas where beach cleanups have occurred, government agencies responsible for monitoring trash containers indicate an increase in the amount of plastic debris which is disposed of properly.

Each year, our data gathering gets a little more sophisticated. As you might imagine, turning loose thousands of volunteers for 3 h with no "form-filling-out training" doesn't result in precise accounting of specific materials or number of pieces. But it does give an index of the type of debris and the probable source. The first 4 years we had a very general, short questionnaire. It gave us bulk figures, because volunteers would write "some," "many," "lots," "a few," under number of pieces. In 1988, we worked with the Center for Marine Conservation and used the questionnaire and guide which was used by approximately 43,000 volunteers nationally. The new questionnaire is more complex and specific. Prior to the cleanups, there was virtually no documentation on the amount or source of marine debris. So we have come a long way!

Our volunteers show up to work, are given a large collection bag, questionnaire, reminders about beach safety, and turned loose. Three hours later they come back laden with trash, enthusiasm, and stories of the weird things they found. We treat them to a free lunch to give them an opportunity to share their stories.

In years past, all of the debris from Oregon's cleanup went directly into landfills, thanks to the generosity of the Oregon Sanitary Service Institute. This year we introduced a "beach buddy" system. We asked volunteers to work in pairs and separate the plastic from other debris and place it in a special bag. After the cleanup, all the plastic and polystyrene foam was picked up by Environmental Pacific Corporation, taken to Portland, and analyzed to see how much of it could be recycled. We invited the press to watch us rip open the sacks, not knowing for sure what we would find. Much to my relief, all of it was plastic and most was

recyclable. On the minus side, I think we asked too much of the volunteers. It is not possible for one person to carry two sacks, a clipboard, writing tools, and also to pick up debris. So the system still needs refinement.

Many of our volunteers have participated in all five cleanups, and we are beginning to see more groups who charter buses for the trip from inland cities to the coast. Private industries sponsor employee trips, schools use the cleanup as an official school function, and civic groups organize carpooling and their own potluck picnics on the cleanup day.

Going after marine debris as "litter" on the beaches does not have the same public appeal as focusing on the issue of entanglement and ingestion by fish and wildlife. That focus has attracted the media and gotten new people interested and involved. I am sure everyone in this room knows the risk in getting people stirred up and emotionally involved. All of a sudden, the statistics you gather are used in very creative ways to prove a point on all sides of the marine debris and plastic recycling issues.

One of my earlier recommendations was to get a media blitz in the popular press, not just in obscure technical or professional journals. I am pleased to report there is hardly a week goes by that I don't run across a marine debris article in a commercial fishing industry magazine, conservation organization newsletter, or the newspaper. The state natural resource agency magazines and Sea Grant publications have also done an excellent job to further document the problem through feature articles complete with color photographs of injured wildlife.

I hope this trend continues. There should be repeated articles in newspapers, not just in the outdoor section but in business and science. Even the special newspaper supplements available to tourists along the coast should have articles on marine debris. The amount of trash on beaches has an adverse economic impact for coastal communities and states competing for tourism dollars. That fact was brought home to us in 1988 with the hospital waste showing up on New York and New Jersey beaches.

The publications which have not picked up on the severity of marine debris are those targeted for the sport fishing and recreational boating public. Because of the way licenses and permits are issued, recreationists have been missed by traditional Federal agency notices. We have found a larger percentage of bait containers and recreational gear during our cleanup since commercial vessel owners are better informed. For instance, I don't think the recreational fleet knows about the adoption of Annex V to the International Convention for the Prevention of Pollution from Ships (MARPOL).

A major value of the cleanups is networking with people in coastal states working on marine debris. The networking provides a vehicle to communicate findings and the status of state and Federal legislation; compare how the cleanups are organized; and share artwork, slogans and campaign strategies, what works with the media, and how to get donated materials or funding. Having the cleanups clustered during 1 month in the fall gives everyone higher visibility with the public and news media.

Now that we have the new questionnaire, we can get a better handle on how to identify items that cause the majority of entanglement or ingestion problems and focus our efforts on their source.

One of the most exciting things to come along is the pilot project conducted by the Port of Newport here in Oregon. They set up a recycling program for commercial fishermen and other marine users to separate their trash at the dock. They gave the wood to senior citizens and sold the scrap paper, glass, and metal, and only a small portion was left over for the landfill. The net fragments were recycled by tourists wanting decorations for their patios or local citizens needing supports for their vegetable or backstops for their softball fields. That 1-year program gained support and energy from a small commercial fishing community which has radiated enthusiasm and interest to the entire Pacific Rim fishing industry. Its coordinator, Fran Recht, has a new grant to implement similar projects in Alaska, California, Oregon, and Washington this year and continue educational programs with the commercial fishing industry and port officials. As long as ocean users continue to dump trash overboard, beach cleanups have a transitory value in ridding the beaches of debris. The Newport project has directly reduced the amount of debris on Oregon's central coast.

The adoption of Annex V to MARPOL has provided strong incentives for improved port facilities and less dumping at sea. I suspect it will foster accelerated plastic recycling programs.

In Oregon we have good news. On 8 October 1988, we attracted 2,200 volunteers. But they were only able to collect 14.2 tons compared to the 26.3 tons in 1984. Each year we have seen a steady decline in the amount collected, and there are several contributing factors. Our weather has been mild each fall with no major storms depositing new trash before the cleanup. Luck of the currents, no doubt. Also, the Oregon State Parks Department has held a "Company's Coming" cleanup in the spring for the past 3 years, so we didn't have an entire year's accumulation. As a general rule, beach users are carrying out their own trash and debris they see washed on shore, and on Oregon's central coast, adjacent to the Port of Newport pilot project, there was simply less debris available. The increased public awareness through the cleanups has made a big difference in Oregon.

As an extension to the regularly scheduled cleanups, we launched an "adopt-a-beach" program patterned after the State of Texas, inviting Oregonians to choose a section of the Oregon coast they want to "adopt." All we ask is that they clean it three times a year and tell us what they find.

I am really pleased to visit with you and share my enthusiasm about how one person's idea can make a change. Since being involved in cleaning beaches, I am better informed about entanglement and ingestion by wildlife, environmental monitoring using citizen volunteers, how plastic is made and recycled, and best of all how valuable trash can be.

Thank you.