

2008-2010 BLACK BEAR MANAGEMENT PROGRAM REPORT

Olympic National Park

EXECUTIVE SUMMARY

This report summarizes three years of bear observations and management in Olympic National Park. In 2008, 477 observations were reported; 20 of those observations were incidents, however none involved a bear getting food or damaging gear. In 2009 there were 464 observations reported of which 26 were incidents. Two incidents in 2009 involved a bear entering a tent and one of a bear being fed from a vehicle, however all three of these incidents were reported with limited information or as a second hand report so no follow-up was possible. In 2010 there was a similar number of observations reported (477) however the number of incidents increased to 54. This is double the number of reports of any year to date. The majority of the increase was due to repeated re-occurrences of a sow with 2 cubs and a sow with 1 cub spending a large portion of the summer in the Glacier Meadows campground (41 incidents). There also were two incidents of a bear destroying gear; one bear broke into a privy container and another bear broke into a bear vault with food in it and a chewed up chainsaw gas/oil caps and the chaps.



INTRODUCTION

From 1999 through 2002 the black bear management program in Olympic National Park saw vast improvement. For details on projects completed, please see the 1999-2000, 2001, and 2002 Program Summary Reports. With the exception of installing animal-proof dumpster lids, all projects related to RMP statement 404.030 are completed. From 2002-2007 program management was in the mode of sustaining programs implemented in 2002, and we attempted to sustain those efforts in 2008-2010. Public and employee education remained a top priority of the program. The WIC continued the Animal Resistant Food Canister (ARFC) loan program, vastly improving wilderness food storage options for park visitors. The Seven Lakes Basin area went to a mandatory bear canister use area, and all bear wires were removed in 2009. Park staff, continued to report bear observations and the NRM division maintained the bear observation database. Finally, NRM, WIC, and/or Resource Protection staff attempted to respond each time a report was received that a bear had received a food reward.

However, as it gets longer since the bear management program was transformed with the infusion of fee funds in 2000 and 2001, our ability to sustain certain portions of the bear, and overall hazard/nuisance animal management program, has diminished. The seasonal hazard/ nuisance animal seasonal biotech position has decreased yearly from what was originally a full time position. In 2008 we were able to support that position for only a month and in 2010 we hit an all-time low, and were only able to support it for 2 weeks. We are only able to keep that function alive through job sharing with other project funds. This decrease in staffing has had consequent effects on program management and implementation. Priority has been placed on data management and incident response, but with that level of support it has been impossible to keep up on data entry or have staff available whenever incidents occur.

BEAR REPORTS

The use of bear observation /incident forms was initiated in 1999 and bear logs at ranger stations a year later in 2000. Park staff and some visiting researchers continued to report bear observations in 2008-2010. Rangers noted bear observations on the simple log forms, while they documented more interesting, unique, or troublesome reports on the detailed "Black Bear Incident/Observation Form". We encouraged ranger staff and other park employees to utilize the forms to report all bear sightings: both those seen by staff and those reported by visitors. Observation/interaction forms were available as hard copies at all ranger stations, on the ONP intranet site (<http://www.olymp.nps.gov/>), as well as by e-mail. We entered each observation into a Microsoft Excel database.

During 2008-2010 park staff, visiting researchers, and park visitors recorded between 464-477 bear observations (Figure 1). Observations have been consistent these 3 years. The peak of observations was 650 in 2002.

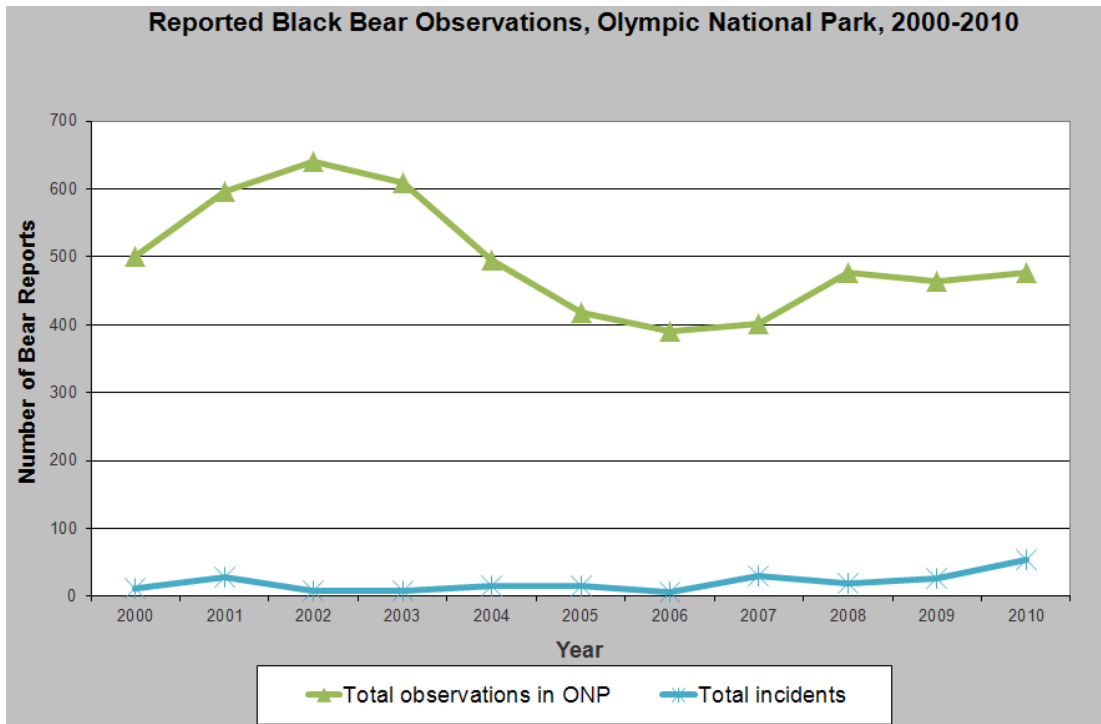


Figure 1: Reported Black Bear Observations in Olympic National Park from 2000-2010.

We received reports from all areas of the park (Table 1); the majority centered near trails and other areas of high visitor concentration. Though the system continues to depend on ranger enthusiasm and interest in reporting observations, this information is useful for indicating areas of high bear concentration and reproduction. It also provides data on the seasonality of observations in an area and may give managers important insight into general bear seasonal movement patterns.

Table 1: Locations of *reported* black bear observations, Olympic National Park in 2007-2010¹.

Park Area	# of Bear Reports			
	2007	2008	2009	2010
Bailey Range	2	1	2	4
Bogachiel	0	0	3	0
Boulder Creek Valley, Appleton Pass	0	2	1	5
Cameron/Graywolf River Valleys	0	0	5	2
Deer Park	2	0	0	0
Dosewallips River Valley	8	15	9	25
Duckabush River Valley	2	0	0	0
East Fork Quinault River Valley, Anderson Pass	52	43	46	12
Elwha River Valley, include Dodger Point	49	46	37	27
Hoh River Valley (including Glacier Meadows and Hoh Lake)	38	38	23	74

Park Area	# of Bear Reports			
	2007	2008	2009	2010
Hurricane/Obstruction/Grand Valley	42	79	111	153
Kalaloch	0	0	0	0
Lake Crescent	0	0	0	0
Lake Quinault	0	1	0	0
Mora (North the Norweigan Memorial, South to Oil City)	0	0	0	0
North Fork Quinault River Valley, Low Divide, Skyline	18	33	14	9
O'Neill Pass Area, including upper Duckabush and Home Sweet Home	23	61	56	27
Ozette Lake and coast (North to Shi Shi, South to Norweigan Memorial)	3	9	0	0
Queets River Valley	1	0	0	0
Royal Basin	0	0	0	1
Seven Lakes Basin/High Divide, Cat Basin, Upper Bogachiel	109	98	119	97
Sol Duc River Valley	0	0	5	0
Staircase/Skokomish River Valley	52	51	33	41
Totals:	401	477	464	477

¹Numbers subject to change in subsequent annual reports due to late-arriving observation forms.

BLACK BEAR INCIDENTS

We define an “incident” as any time a bear exhibited behavior indicating either a high level of habituation (comfort or ambivalence around people, as indicated by actions such as hanging around a camping area), a bear attempting to gain food, or a bear acting aggressively (including defensively). We classified each incident as belonging to one of ten categories (Table 2). In 2008 there were 20 incidents, however there were not any incidents of a bear attempting to get or getting food. In 2009 there were two reports of a bear entering a tent and one of a bear being fed from a vehicle. All 3 of these incidents were reported with limited details or as a second hand report. In 2010, there were two incidents of a bear destroying gear. In one incident a bear broke into a privy container and in the second the a bear broke into a bear vault with food in it and a chewing up chainsaw gas/oil caps (the fuel was a biofuel) and the chaps. There were more incidents in 2010 than ever before (54 incidents). The main reason for this is because of a sow with 2 cubs and a sow with 1 cub spent a large portion of the summer in the Glacier Meadows campground (41 incidents). Hazing sows with cubs away from an area is difficult due to the fact that the cubs will tree almost immediately which prevents animals getting the right message.

see Appendix 1.

Table 2: Number and types of black bear incidents in Olympic National Park, 2005-2010

	2005	2006	2007	2008	2009	2010
Total reports	404	348	401	477	464	477
Total incidents	15	7	31	20	26	54
A: Bear unsuccessfully attempted to obtain food- no gear damage.	0	0	0	0	2	0
B: Bear successfully obtained food. No major gear damage.	0	3	0	0	1	0
C: Bear obtained food and damaged gear in doing so.	0	0	0	0	0	2
D: Bear damaged gear without getting food	0	0	0	0	0	0
E. Bear intimidating people (stalking, growling, etc.)	2	3	1	3	3	2
F: Bear hanging around camping area- easily frightened with aversive conditioning	1	0	5	3	4	0
G: Bear hanging around camping area- not easily frightened away	6	0	0	6	2	1
H. Bear in camping area; aversive conditioning not utilized (new field in 2001)	5	0	4	0	3	1
I: Bear slow to leave when encountered on trail or road (new 2007) after people make noise and try to scare it off (new 2003)	1	1	21	4	11	4
J: Bear hanging around close to camping area, trail, or road (new 2008), no one tried to get it to move off, but it appears habituated (new 2003)	0	0	0	4	0	44
Total number of incidents	15	7	31	20	26	54

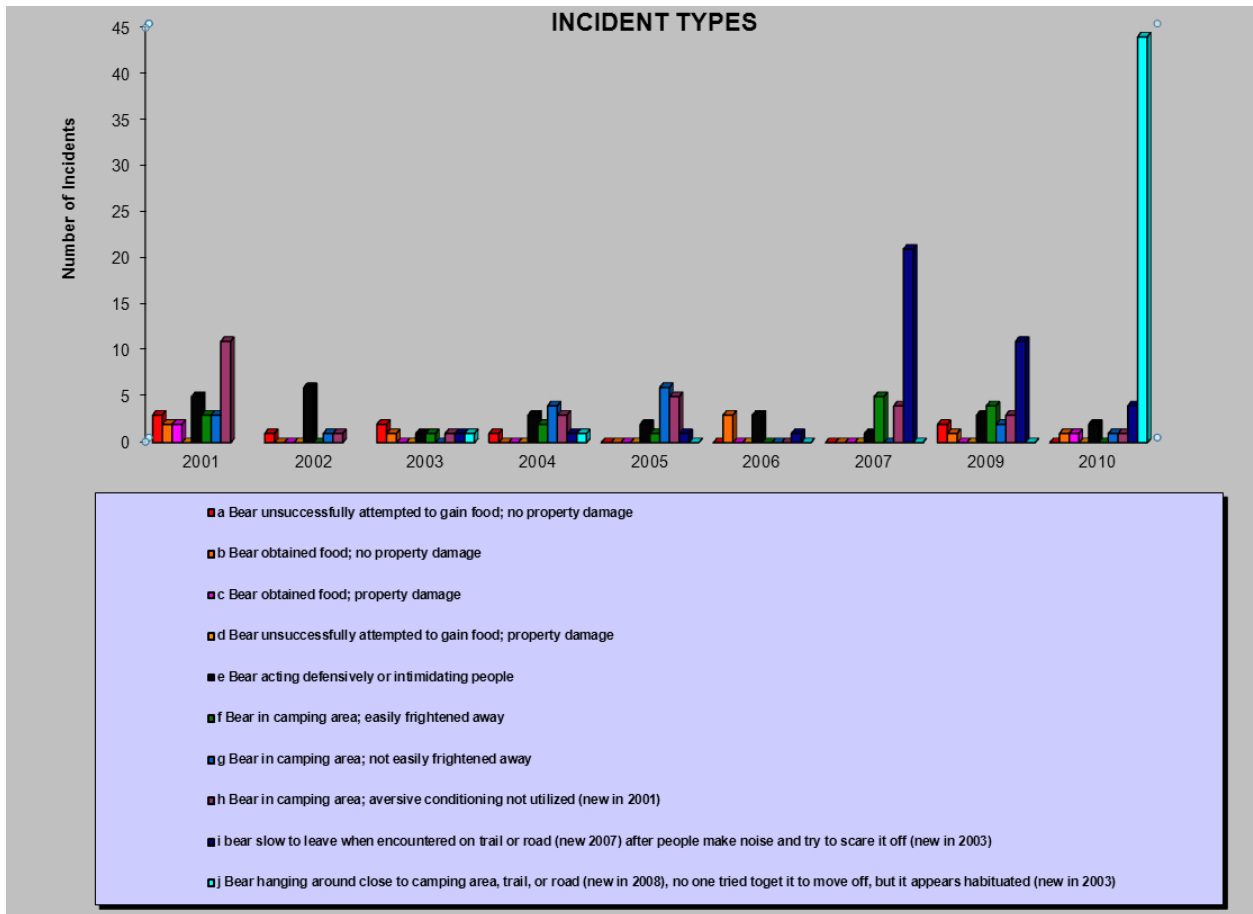


Figure 2: Reported Black Bear Incidents in Olympic National Park, 2001-2010

Table 3: Locations of *reported* black bear incidents in Olympic National Park, 2005-2010

Park Area	# of Incidents					
	2005	2006	2007	2008	2009	2010
Bailey Range						
Boulder Creek Valley, Appleton Pass, Happy Lake						
Cameron/Graywolf					1	
Deer Park						
Dosewallips River Valley					1	1
Duckabush Lower River Valley						
East Fork Quinault River Valley, Anderson Pass			1		1	
Elwha River Valley, include Dodger Point	1	1	3	8	1	4
Hoh River Valley, Hoh Lake, Glacier Meadows			1	2	5	41
Hurricane/Obstruction/Grand Valley	2		20	6	10	4

Kalaloch						
Lake Crescent		1			1	
Lake Quinault						
Mora, North to Nowegian, south to Oil City						
North Fork Quinault River Valley, Low Divide, Skyline	1	4			2	3
O'Neill Pass Area, including upper Duckabush and Home Sweet Home					2	
Ozette Lake, North to Shi Shi, south to Norwegian		1		4		
Queets River Valley						
Royal Basin						1
Seven Lakes Basin/High Divide, Cat Basin, Upper Bogachiel	5		1		2	
Solduc River Valley						
Staircase/Skokomish River Valley	6		4			
Total:	15	7	30	20	26	54

MANAGEMENT ACTIONS TAKEN

Food storage/clean camp education: A cooperative effort between the divisions of Natural Resources Management, Resource Education, Resource Protection, and the Wilderness Information Center was developed to disseminate educational materials. Previously developed front-country literature includes: permanent picnic table signs for campgrounds, food-storage stickers for food lockers, a bear and food-storage informational sign for front-country bulletin boards, leaflets to be handed out at each entrance station, and notices for roving rangers to use in campgrounds to either thank or caution campers for the way in which their food is stored. Backcountry literature includes: trailhead bulletin board signs, a handout on proper food storage and bear-etiquette in wilderness, and food-storage “warning” signs for backcountry rangers to utilize at camps where food is stored improperly. Additionally, Resource Education and Resource Protection staff disseminated clean camping information during evening programs and campground roves. Wilderness Information Center and ranger station staff contacted backcountry visitors about proper food storage and associated clean camping etiquette. Finally, the Olympic National Park website contains a thorough section on proper food storage and appropriate behavior in bear country.

With the diminishment of resources, we are no longer able to sustain, or implement as fully, some of the above mentioned items. As old picnic tables were replaced with new ones, we found that the replacements were not equipped with the food storage signs. We are gradually trying to rectify that situation through working with the maintenance division; however some tables were out for over a year without proper signage. We also

no longer are able to hand out food storage fliers to visitors coming through the entrance stations: the supply ran out and we do not have funds to replace them. Finally, the dumpster lids have still not been replaced with bear proof lids: this change has been hung up in contracting since 2002. We are relying in metal clips attached to plastic dumpster lids to keep bears and other wildlife out of the garbage. Besides being no deterrent to a determined bear, this system often fails due to 1) people not latching the lids, and 2) the latches breaking, being stolen, or otherwise disappearing.

Bear-proof facilities in wilderness areas: Over the past several years, NRM, Resource protection and wilderness staff installed bear wire pulley systems at high-use sites throughout the backcountry. Installation and maintenance of wires continues, however it has become less sustainable over the years without dedicated resources and staff oversight. In 2007 Resource Protection staff initiated discussions about the long term maintenance of this program. Several staff have proposed going to ARFC's only and removal of the wires. A proposal was submitted to test this out in Seven Lakes Basin and the change was instituted in 2009.

Animal-resistant food canisters (ARFC's): Although most high-use sites in the park are equipped with bear wires, the wilderness character of the backcountry must be preserved; therefore, the park cannot continue to install bear wires in each and every campsite. In an effort to place the responsibility of food storage on park visitors in areas without bear wires, the park continues to advocate the use of ARFC's for park visitors and staff. Wilderness visitors borrowed cans from the WIC and ranger stations throughout the park for a suggested donation of \$3 per trip. In addition to canisters purchased for the loan program, maintenance staff fabricated large after-hours ARFC return receptacles, made available at each ranger station. The program saw resounding success with ARFC's.

STAFF TRAINING

Patti Happe and Dave Manson completed 2 firearm qualifications each year for 2008-2010. The first qualification is a course of fire using a Dan-Inject No. 0437 Mod JM CO2 dart rifle, NPS # 37426, equipped with a telescopic sight, utilizing practice darts. The course of fire is in compliance with NPS-77, Chapter 5, Natural Resource Management. The second qualification was a course for 12 gauge shotgun in accordance with RM-9 (rifled slug portion only). The qualification was held at the Port Angeles Range or Forks Range.

Staff received general bear management training at Olympic National Park's seasonal training in 2008-2010.

MANAGEMENT RECOMMENDATIONS FOR 2012 and beyond

Resources: Secure funding for at least a half time hazard animal technician during the spring and summer for program oversight, interdivisional coordination, training and

outreach, and data management. In addition, the bear management plan needs to be updated.

Bear observation database: Continue use of black bear observation forms at front-country and wilderness ranger stations. Ensure that ranger staff knows when to report unusual sightings. Also ask that rangers only report one bear per area per day, unless they know that more than one bear is present.

Reactive management strategies: Ensure that sufficient staff (Ranger and NRM staff) is trained in the use of darting rifles, the bear culvert trap and rubber ballistics in the event that bear hazing is deemed necessary.

Proactive management strategies:

Food storage/clean camp education:

Reinforce the message about the need for, and the methods of, proper food and garbage storage for park employees and concessionaires, especially seasonal and volunteer crews. These folks need to both model good behavior and be able to inform the visiting public about food storage issues.

Continue to utilize food storage/black bear informational signs at front-country campground bulletin boards, trailhead bulletin boards, and on picnic tables. Maintenance staff will be affixing new signage to all new picnic tables. Also continue use of food storage “Warning”, “Thank You” and “Impound” notices in campgrounds. Hand out “Wildlife Safety and You” brochures at each park entrance station. Investigate possibility of making literature bilingual. Distribute letter to all employees (concession and Park Service) living in park housing about keeping clean yards and trash areas.

In addition to the use of educational signs, NRM staff will continue to encourage and support Resource Education staff in their endeavors to educate the public about bears and other wildlife at evening programs and other such presentations. We will assist Resource Education, Wilderness Information Center, and ranger staff in any way possible to increase visitor awareness and understanding of living and traveling in bear country.

Bear wires: Maintain existing wires in backcountry areas. Remove all remaining single-wire systems and either replace with pulley system wires or encourage ARFC use at those locations. Install new systems ONLY in high-use areas where they are deemed absolutely necessary. Ensure that in each area with bear-wires, that these wires are able to accommodate all visitors to the area. Place “Bear Wire” signs at areas where wire is difficult to find.

Animal Resistant Food Canister loan program: Continue to manage the AFRC loan program. Use donation money to purchase more canisters on and as-needed basis.

Park staff needs: Purchase ARFC's for any more staff that requests them (i.e. radio shop, Cultural Resources). Talk to EOC about utilizing ARFC's during overnight search and rescue operations. Options for trail crew food storage should continue to be explored and implemented. Conduct session at seasonal training, and organize training sessions/talks for employees at park concession areas.

Appendix 1:

Selected Incident Details (hazing or repeated incidents in one area):

2008

“Right after my shift on Wednesday August 13th at 5:00 pm Chris Rohde came into the visitor center, and reported a black bear that was close to the employee parking area with a large crowd gathering. I asked for the visitor center staff for assistance in crowd control and keeping people a safe distance from the bear. At my command I had Traffic blocked at the back walkway to the visitor center and at the turnoff to the overnight lot. Jon Preston and I flanked the bear from behind blocking its path into the campground. After repeated noise making attempts to chase the bear across the pond (safest escape route for the bear) and checking to see if all persons were clear of the line of fire, I took one shot at the bear’s hind quarter at a distance of 75 feet. I struck the bear’s hind quarter and it started to run towards the pond and escape, yet it then decided to climb a maple tree.... The crowd then dispersed and traffic was cleared. The bear came back down and crossed the pond at 8:30 pm that night after darkness fell.” This was the only firearm hazing of 2008.”

There were 5 incidents of a bear hanging out in the camping areas at Elkhorn, it was hazed with an air horn by ranger staff.

A sow with one cub used the trail system between the Headquarters building and USGS /Maintenance building. To prevent any problems the trail system was closed until they moved to a different location.

Two reports of hazing with yelling along the Hurricane Ridge Road

2009

There were two separate incidents of a bear entering a tent, once in the Quinalt and once in the Hoh. Both incidents were poorly reported with little additional information. There was also one second hand report of a visitor feeding a bear along the Hurricane Ridge road.

There was an incident of a bear attempting to get at some garbage along the Quinalt North Shore road, but the residents noticed and fired a shotgun over its head. It ran away quickly

A bear was seen along the Marymere trail just watching as visitors walked by. It took a couple of steps toward NRM staff. Rangers hazed the black bear with two rubber flat rounds. The black bear then fled from the scene away from rangers and uphill. After second shot which hit bear in the rump, bear continued up hill and out of sight of rangers, settling in behind cover of understory.

On the Hurricane Ridge Road, there were 7 incidents where aversive conditioning with trash bagging or yelling was used. An additional 2 used hazing rounds from the shotgun.

2010

Glacier Meadows camping area: A group of 2 sows and 3 cubs were seen at Glacier Meadows since late June for over a month. Bears have not obtained any human food and seem to mostly ignore people, only coming out in the mornings and during the day when the camp is quiet. Bears have not shown any aggressive or defensive behavior, although there have been several close encounters on the trail between the bears, hikers and ranger. Several hiking parties have shouted at the bears and the cubs climb the nearest tall tree, the sow remains in the area watching hikers until they move off. Bears activities include walking, grazing, and ripping off bark for the cambium layer. Human food has been stored in BRFC's or on the bear wire.

Royal Basin: A bear had gotten into the filled, staged fiberglass vaults of human waste at Royal Basin. The lids and probably the fiberglass itself are nowhere near bear-proof but I've never heard that this has been an issue elsewhere, in all the various places we have vaults of poo sitting around for months at a time waiting to be flown out. It was clearly a bear from the prints it made in the mess it created...

Deception Creek (Dosewallips): Trail Crew left some tools, saw, chaps, fuel container (piggy back), hand tools and at least one bear vault with some food in it cached off trail near Deception creek on the Dose for their days off. When they went back in a bear had gotten into the cache. It had destroyed the bear vault and ate the food, totally destroyed the piggy back, all they found was a couple small pieces of plastic and the tag that was on it, it also chewed up the saw pretty good, chewed the fuel cap off, the handle and punctured the gas tank. They never saw a bear the whole time they were there, before or after and never had any other issues.

There were 4 incidents of a bear being on an elk carcass and not moving off when aversive yelling used.

Prepared by Dave Manson, Wildlife Technician, and Patti Happe, Olympic National Park Wildlife Branch Chief.

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