

Summer 2010

# BEAR TRAILS



News from the Alaska Department of Fish and Game

## Black Bear Hunting on Prince of Wales Island

Bear hunting is a popular and enjoyable pastime in Alaska, and the Southeast panhandle of the state offers some of the most phenomenal bear hunting opportunities anywhere in the state. Each year hundreds of Alaskans as well as visitors from other states take to the woods in search of black bears. Nowhere is black bear hunting more popular than on a few of the islands in the southern part of the panhandle, most notably Prince of Wales (POW) and Kuiu islands.

From the mid 1990s to 2005, black bear harvest from POW increased dramatically. Since then, the harvest has been declining just as dramatically. With these changes has come some uncertainty and concern about the conservation and sustainability of this bear population. In response, the Alaska Board of Game (BOG) took action at its 2008 meeting to address the concern for the bear population on POW. Increased black bear harvests in other parts of southern Southeast Alaska have also drawn attention from our department and BOG members.

This issue of *Bear Trails* offers information and insight into the recent history of bear hunting on POW, on the Board of Game's actions, the department's related activities and ensuing observations, and anticipated future direction towards managing this resource. I hope you will take a few moments to read the newsletter and to provide your feedback on hunt-related questions you may have or those posed by our department (a questionnaire is enclosed). Your input is extremely valuable to us as we seek to manage black bears on POW and other parts of Southeast Alaska in a manner that ensures public opportunity while simultaneously ensuring the long-term conservation and sustainability of the species. Thanks for any feedback you are able to offer.

Doug Larsen, Regional Supervisor  
Region I- Southeast Alaska  
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Department of Fish and Game

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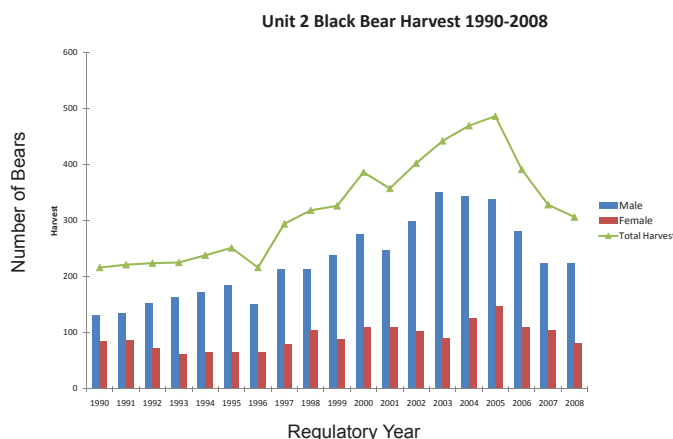


# Black Bear Harvest on Prince of Wales Island

## Concern About Declines

Unlike many areas in the northern part of the state, where black bears are numerous and managers are trying to reduce their numbers to bolster moose and caribou populations, managers of black bears on Prince of Wales Island (POW) and elsewhere in Southeast Alaska are concerned about apparent declines in the bear population.

Historically, hunters consistently harvested an average of 225 black bears annually from POW and the surrounding archipelago in southern Southeast Alaska. However, beginning in the late 1990s harvest began to steadily increase until it peaked at nearly 500 bears during the 2005 regulatory year (July 1 – June 30). Since then the annual harvest has declined each year



(Graph Above). We have no way to track other sources of mortality, including illegal kills and wounding loss. Along with this recent decline in harvest, managers have noted declines in average skull sizes and ages of harvested bears from the central roaded portion of POW where the highest harvests occur. This suggests a decrease in large bears, which may suggest a declining population. Although no bear population demographics are available for POW, high harvests of female bears (particularly in the fall), declining harvests, declines in skull size and age and observations of fewer

bears from field biologists working on POW, have raised concerns about this population. In addition, local residents, hunting guides, tour operators, transporters, local hunters and other members of the public are increasingly voicing concerns about chronic low bear numbers compared to just 10-15 years ago. Similar concerns exist for other parts of Southeast Alaska.

## Regulatory History

Although our most immediate concerns rest with POW Island, the issue with black bear harvest in a broader area began during the 1990s. Between 1990 and 2000 the black bear harvest in Game Management Units 1, 2, and 3 increased steadily. By 1999, the Alaska Department of Fish and Game (ADF&G) became concerned with the high harvest on Kuiu Island in Unit 3 and through a 2000 BOG proposal, implemented a harvest cap for non-resident hunters. This cap had its desired effect of reducing the black bear harvest on Kuiu. However, some ADF&G managers believe that displaced hunting pressure from Kuiu contributed, in part, to continued harvest increases on POW and elsewhere from displaced hunters. The department is concerned that the increasing harvest on POW led to a decline in bear numbers, raising concerns about the sustainability of this level of harvest. We believe it is necessary to slow the harvest of black bears, particularly females, until we can better assess the impacts of this harvest level and the competing interests for this wildlife resource.

## Fall and Spring Harvests

In an effort to better understand the situation on POW, department managers studied harvest records and discerned a striking difference in the black bear take between the spring and fall seasons (Graphs Opposite Page). In the spring, hunters take on average approximately 15% female

bears. In contrast during the fall season, roughly half the bears harvested are females. There are several reasons for this disparity. In the spring, the two most popular hunting methods are boating along shorelines and use of bait stations. Both methods give hunters opportunities to view



Photo courtesy of Drake Peterson, hunter- Lloyd Davis

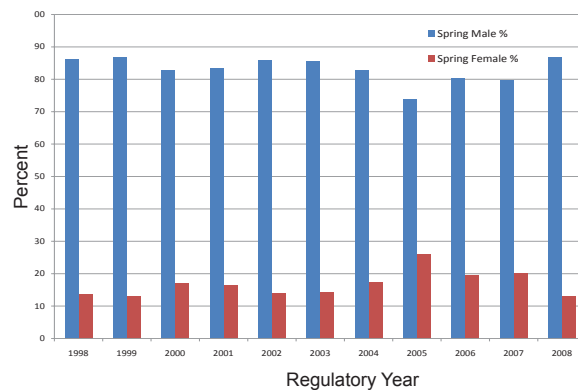


Photo courtesy of Seth Grove

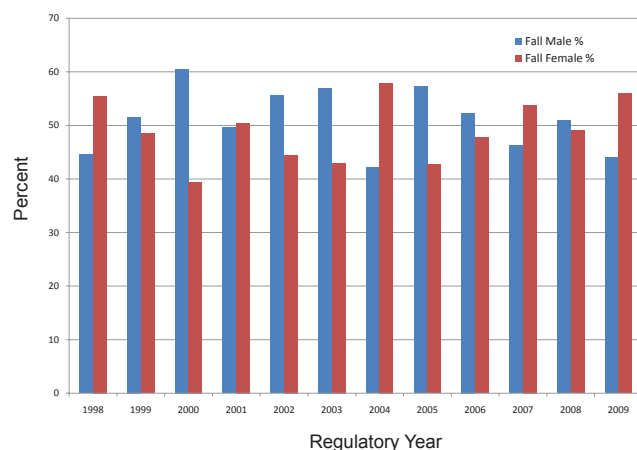
multiple animals and time to select larger bears which are often males. Also, during the spring, female bears will often be accompanied by cubs and are therefore not legal for harvest. In the fall, however, hunters tend to focus their efforts on streams, where bears concentrate to forage on

salmon. Some of these bears are females that are no longer with cubs and are legal for harvest. Also, we suspect that many mature boars have moved off the streams by September when hunting season starts. This allows more females and young bears to use this food resource, thus leaving them more vulnerable to hunters. And finally, stream hunting doesn't allow for as much scrutiny of observed bears since they can quickly disappear into dense cover. Hunters may be more likely to take a smaller bear or a female as a result. When all these factors are combined, it is easy to see that fall hunting has the greatest potential to seriously impact the female segment of the black bear population.

Unit 2 Spring Black Bear Harvest By Sex



Unit 2 Fall Black Bear Harvest By Sex



**Graphs:** The two graphs shown above demonstrate the difference between the male and female harvest of bears taken in the spring and fall.

# 2008 Board of Game Meeting

## Proposals Considered

In order to curb the apparent population decline, managers felt it was important to address the fall harvest in an attempt to reduce the loss of female bears. At the November 2008 BOG meeting, the



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department presented a proposal to eliminate the September 1-15 portion of the fall season, as this appeared to be when most fall harvest was taking place. A number of other potential options were presented to the board, from eliminating the fall season entirely to going to a restricted permit drawing hunt, to doing nothing at all. Several discussions took place among ADF&G staff, other agencies, BOG members, and members of the public, both during the meeting and in special break-out sessions at the November 2008 meeting.

## Controlled Use Area

The approach decided upon was to create a controlled use area (CUA), restricting the use of motorized land vehicles for bear hunting



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during September. The CUA went into effect on July 1 2009. The CUA includes both Game Management Units 2 and 3. Unit 3 was included to address any potential shift in hunter effort from Unit 2, such as the “domino” effect we believe occurred with Kuiu Island in the early 2000s.

## Revisit CUA at Fall 2010 BOG Mtg

The CUA was created with the caveat that it would be revisited at the 2010 BOG meeting to assess the success of this action on decreasing the female bear harvest, as well as its impact on commercial and other uses of the resource. Discussions at the 2010 Board meeting will also focus on whether other actions are necessary or if the CUA is sufficient at this time. Part of this assessment will involve the discussion of data we collected from a companion proposal that was also passed at the 2008 meeting which requires all black bear hunters to obtain a harvest ticket/report prior to hunting (proposal 38). These harvest reports provide the department with effort data from successful, as well as unsuccessful, hunters. This should shed additional light on the state of the bear population on POW and elsewhere in the region. Additionally, the contact information we receive from these harvest tickets will allow us to survey hunters to assess additional hunter effort information.

# Here's how regulations are made:



## Research Projects on POW



Jeff Jemison, © ADF&G

Another part of this assessment is the implementation and continuation of several research projects on POW: a DNA hair study, a bear radio collaring study, and a deer fawn mortality study.

### Hair Snaring and DNA

The objectives of this study are to use hair collected from bears to catalog their DNA makeup, and then use the information to calculate a harvest rate as well as rough density estimate of bears. Data collected through this effort are important in helping us determine if the present harvest is sustainable. To accomplish this, hair snares have been deployed across the island to collect hair and associated DNA from black bears. The project was initiated in the summer of 2008 and efforts were intensified in summer 2009. By comparing DNA collected in the field from individual bears with DNA collected from harvested bears at the time of sealing, a harvest rate can be calculated which can be converted to a rough population estimate. We are still awaiting DNA analyses from a contracted lab before initiating calculations of harvest rates.



Photo Courtesy of Doug Wilson

### Radio Collaring Study

Department biologists are collaring bears with VHF- and GPS-equipped collars with the objectives of learning about their habitat use, den site locations, reproduction, survival, movement patterns and vulnerability to hunting near roads and streams. This study began in fall 2009 and resumed in spring 2010. We are attempting to trap bears with modified Aldrich foot snares in bucket sets and by free range darting with the help of trained bear hounds. We have equipped ten bears with GPS collars, and five with VHF collars thus far.



Photo Courtesy of Todd Brinkman

### Deer Fawn Mortality Study

In this study, a graduate student sponsored by ADF&G will be collaring adult deer and neonate fawns on POW during the next three springs. Biologists are hopeful the project will yield valuable information on the degree of black bear predation on deer fawns, birth site selection and habitat use.

# Where Do We Go From Here?

## Findings for Unit 2

The CUA has been in effect for one fall season and early results show some promise in helping us meet our objective of lowering the female bear harvest. It appears that by limiting hunter access to salmon streams along the road system, the female portion and overall fall harvest is down approximately 40%, from an average of 55 female bears/year during 1998-2008, to 35 female bears in fall 2009. The male harvest also decreased from an average of 60 bears/year during 1998 to 2008, to just 28 during fall 2009. Although the overall harvest was down, there appeared to be a distinct shift in hunter effort from September to October to avoid the CUA. Hunters harvested 15 females in October 2009 after averaging 5.5 females in October during the previous ten years. This shift in hunting effort offset some of the success resulting from the CUA and may need to be addressed in order to achieve the desired harvest reduction. On a positive front, Alaska Wildlife Troopers did not observe any hunter infractions or issues within the CUA.

## Findings for Units 1 & 3

In order to evaluate whether the CUA caused a shift or domino effect to other units in the region (specifically Units 1 and 3), harvest data was examined from fall 2009 and compared to previous years. During the 10 year period prior to 2009, the Unit 1 mean fall harvest was 57 bears, while the mean fall harvest for Unit 3 was 50 bears. During fall 2009, a harvest of 33 bears in Unit 1 and 35 in Unit 3 was reported (Defense of Life and Property and other non-hunting mortalities were excluded.) The fall 2009 harvest for both units was well below the 10-year mean and more closely mirrored the low harvests from the prior 10 years. We would have expected an increase to above average harvest in these units if there had been a shift in hunter effort from Unit 2. Given these findings there did not appear to be a domino effect during the 2009 hunting season.

## Discussion

Managers are hopeful the CUA approach to this management concern may prove successful given that the objective of lowering the female harvest in the fall was met to some degree. Only data from additional years will allow us to determine if this will be a successful long term strategy. A number of factors could be influencing the reduced harvest, including the current economic recession, weather conditions, or low hunter success rates. We expect information obtained from the new bear harvest ticket reporting requirement to assist with answering some of these questions.

Harvests could increase as lodges respond to the CUA with more skiff rentals, as hunters learn to adapt to the regulation, or if hunters continue to focus on the October portion of the season. Department managers will be closely monitoring the fall 2010 season to see if the reduced fall harvest continues. Only time will tell if a positive corresponding trend to the overall population will develop. The spike in the October female harvest is concerning and if it continues managers may consider extending the CUA through a part or all of October.

## Recommendation

Results from the 2010 fall hunting season will give us a second year of data to determine the success of the CUA. Additionally, ongoing research will provide information about the POW black bear population, as will data from the newly established black bear harvest ticket reporting system. This information will contribute to discussions at the fall 2010 Board of Game meeting. Additionally, we are seeking feedback from hunters, guides, and others through a questionnaire which we are including with this newsletter. The questionnaire includes a number of possible options for addressing declining bear numbers. We hope you and others will take time to complete and return a questionnaire. Questionnaires are pre-addressed with postage paid. Information obtained through the survey will be shared with the Board of Game members at their November meeting in Ketchikan.

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## News about:

**Black Bear Hunting on Prince of Wales Island,  
Management and Current Research,  
Upcoming Board of Game Meeting**

# Alaska Board of Game Meeting- You're Invited!

The Board of Game will meet in Ketchikan, November 5-9, 2010 to discuss and make changes to regulations affecting Southeast Alaska, which could include changes to black bear hunting on Prince of Wales Island and elsewhere in the region. Regulatory proposals can be provided to the Board of Game, ADFG or local Advisory Committees. Typically, coordination among all entities precedes official submission of proposals to the Board of Game by ADFG.

Board of Game discussions will include the Controlled Use Area and the success this change has had in meeting objectives and addressing concerns. Discussions will also focus on the status of black bears throughout Southeast Alaska. Contact your ADF&G area wildlife office for information or assistance concerning Alaska Board of Game proposals.

**Proposal deadline= August 13, 2010**

**Next Meeting  
Nov. 5-9  
Ketchikan**