The department recently examined the hunting season framework, population monitoring, and damage/public safety response policies (including relocation) in the neighboring states of California, Nevada, Idaho, Washington and Utah. Information was gathered from these states adopted cougar management plans, published reports and conversations with staff or field biologists.

Hunting Seasons

Season Structure

Four of the 5 states examined offer a cougar hunting season and of those, 3 allow the use of trained hounds in addition to calling and spot/stalk hunting as legal methods. Incidental take while pursuing other species (big game) is allowed with proper tags in the 4 states with a season. California prohibits cougar hunting statewide, and Washington prohibits the use of hounds except for cougar removal permits which may be issued in areas with chronic cougar-human conflicts.

There is variation among and within states but typically hunting season are liberal with Nevada having a year round season statewide and Idaho and Utah offering year round seasons in some areas. Nevada allows cougar harvest any time of day or night while the others restrict harvest to normal shooting hours ½ hour before sunrise to ½ hour past sunset. Table 1 shows the typical season structure by state.

Table 1: Summary of cougar hunting seasons in the states of Nevada, Idaho, Washington, Utah and California.

<table>
<thead>
<tr>
<th>State</th>
<th>Time frame</th>
<th>Notes</th>
<th>Season Bag *</th>
<th>Hounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada</td>
<td>Year round</td>
<td>Annual season starts Mar 1 and may be closed mid-season if quotas are met.</td>
<td>2 tags</td>
<td>yes</td>
</tr>
<tr>
<td>Idaho</td>
<td>8/30 or 9/15-3/31 or 4/30</td>
<td>Dates vary by unit.</td>
<td>1 tag with additional tag available in select areas</td>
<td>yes</td>
</tr>
<tr>
<td>Washington</td>
<td>9/1-12/31 and 1/1-3/31</td>
<td>Director may close the Jan–Mar season if harvest guideline is met.</td>
<td>1 tag which may also be used in special permit areas</td>
<td>no</td>
</tr>
<tr>
<td>Utah</td>
<td>Late Nov-early June</td>
<td>Some areas year round.</td>
<td>1 tag</td>
<td>yes</td>
</tr>
<tr>
<td>California</td>
<td>No Season</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

*One cougar per tag; spotted kittens and females with young are protected.
SUMMARY OF COUGAR MANAGEMENT  
IN NEIGHBORING STATES

Harvest Management

Harvest management varies among and within states but can be divided into 3 broad categories: general season, limited entry with controlled tag numbers, or harvest quotas in either a general or limited entry format. Several states had combinations of these strategies depending on the area.

All of the states with a hunting season require mandatory check in of all harvested cougars.

Nevada: Nevada divides the state into 3 regions with a harvest quota established for each region. Tags are available over the counter and can be used in any region in which the quota has not been reached. Harvest objective is set at 15-25% of the estimated population and is adjusted annually.

Idaho: Idaho divides the state into 18 Data Analysis Unit (DAU) and each of them may have a different harvest management strategy. A general season structure with a quota is used in most of the state with some areas being limited entry. The type of quota varies by DAU with some units having a female quota that if reached will allow male only harvest until the end of the season or until the combined quota (if applicable) is reached. Others employ a combined quota that closes the season in that unit. General season tag holders can hunt any open unit until the end of that season.

Washington: Washington uses a general season tag structure and a split season with a harvest guideline attached to the second season to regulate harvest. The state is divided into 49 cougar population management units (PMU). The harvest management guideline is 12-16% of the estimated PMU population. If the harvest guideline is reached the director may close the season in the PMU during the second hunt period Jan 1 – Mar 31. It was also reported that hunters that like to focus on hunting cougar prefer hunting in the second hunt period, but that season can be closed if the quota is filled by deer and elk hunters that can also hunt cougar during the fall seasons.

Utah: Utah uses three different strategies for harvest management; quota, limited entry and split which is limited entry for the early part of the season followed by quota system that allows hunters from other areas until the quota is reached. The harvest management object is 17%-20% adult females in the harvest and .25-.35 cougar treed/day. Areas covered by predator management plans have a goal for adult female harvest greater than 25% over a 3 year period.

There are also some additional special requirements for a few states. Utah offers a voluntary cougar hunting seminar to aid in the identification of males and females as well as other hunting related information. Idaho requires a hound hunting permit in addition to the cougar tag.
SUMMARY OF COUGAR MANAGEMENT
IN NEIGHBORING STATES

Population Modeling/Estimation

Nevada: Nevada uses a model to estimate cougar populations. The details of the model were not made available at this time however the results for the 2014 population estimate was 1,337 cougars. The harvest quota varies between 15-25% of the estimated population and was set at 18% for the 2014 hunting season. The estimated cougar population has been relatively stable in recent years.

Idaho: Idaho primarily uses trends in hunter harvest, age data, and other factors (conflict, other big game objectives) to determine population trends. Like many other western states they have experimented with other techniques but have not found a technique that can be reasonably applied statewide. Idaho does not have a statewide cougar population estimate. Harvest goals are set based on the above referenced trends. The population trend in Idaho has been stable to slightly downward since 1998. Competition with wolves is a suspected factor in many areas. Wolves have also hampered the ability to use hounds in some areas as a management tool.

Washington: Population modeling is conducted at the management unit scale and determines the density of cougars. The density dependent model used incorporates habitat quality, home range size and territoriality. This method is well liked by Washington Department of Fisheries and Wildlife (WDFW) staff because there is quality science that supports this type of modeling to determine quotas, and hunters are starting to understand the procedure. The population seems to be stable the last 10 years although harvest has increased since the use of dogs was banned (more to follow under Conflict Response). WDFW manages for a minimum density of cougar in a unit based on the modeling described above.

Utah: Population modeling is focused on the management unit scale, but a statewide estimate exists by adding the unit estimates together. Utah Division of Wildlife Resources (UDWR) has published two population estimates that seem stable at around 3,000 cougar statewide. Population modeling utilizes a density model based on habitat quality. Instead of having a management objective, management focuses on the results of harvest statistics (3 year block). Adult female harvest is targeted at 17-20% of total harvest. When this percentage decreases below 17%, tags increase and when this percentage increases above 20%, tags decrease. UDWR also monitors the number of cougar treed/day (as a result of using dogs). The target rate is 0.25-0.35 cougar treed/day. When the proportion increases above 0.35, tags increase and when the proportion decreases below 0.25, tags decrease. A cougar management plan for 2009-2021 is published online.

California: California estimates the statewide cougar population to be 4,000 – 6,000 animals, based on an assessment of available habitat completed in the 1990’s.
Conflict Response

Nevada: USDA, APHIS, Wildlife Services (Wildlife Services) handles most of the depredation issues. Human safety complaints are primarily handled by Nevada Division of Wildlife (NDOW) wildlife biologists with support from their conservation officers. Landowners are allowed to kill cougars caught in the act of depredation without prior authorization and the department will issue depredation permits to landowners that have valid cougar depredation. Nevada does not pay compensation for cougar depredation. No data was available on recent trends in damage or human safety complaints. Nevada will not relocate depredating cougars or cougars deemed a threat to human safety.

Idaho: Most of the counties in Idaho have Wildlife Services and they handle most of the cougar damage complaints. Human safety issues are handled by Idaho Department of Fish and Game (IDFG) staff with support from law enforcement. Landowners are able to take cougar caught in the act of depredating. Idaho does have a limited compensation program that covers cougar depredation along with other wildlife damage. Idaho will not relocate depredating cougars or cougars deemed a threat to human safety.

Washington: WDFW’s enforcement staff are the employees that issue depredation permits (i.e. kill permits) and directly handle all human safety cougar reports. All other depredations are supposed to be handled jointly between enforcement and biologists. When a depredation permit is issued, pre-licensed hound hunters are used to fill the permit. Permits are often written with stipulations such as a short valid period and hunt area only within 2 miles of the depredation site to ensure that pressure is kept on the depredating animal. Relocation is rarely used and only applies in situation where a cougar enters an urban area and hasn’t engaged in depredation or exhibited threatening behavior. As a result of increased harvest, biologists have observed an increase in depredation. This was contributed to increased disruption in the social structure (territoriality) aspect of cougar. Many of the depredating cougar are sub-adult males that move into a recently vacated territory of an adult male due to harvest. No depredation compensation program exists.

Utah: Landowners, UDWR and Wildlife Services all handle depredation. No prior authorization for take is required when acting within 72 hours of a depredation event. Relocation is not regularly used. The option exists for rare circumstances when a wandering cougar is spotted in an urban area and has shown no signs of aggression towards people or animals. No depredation compensation program exists.

California: Conflict response in California is detailed within the California Department of Fish and Wildlife Departmental Bulletin Number 2013-02: Human/Wildlife Interactions in California: Mountain Lion Depredation, Public Safety, and Animal Welfare. Reports of cougar wildlife incidences are broken into four categories: Sighting, Depredation, Potential Human Conflict, and Public Safety Wildlife (no attack on human and attack on a human). Responses to wildlife incidences are made by California Department of Fish and Wildlife (CDFW) employees, typically Environmental Scientists assigned to regional wildlife programs for depredation and sightings and Wildlife Officers for public safety.
Sightings are entered into an online Wildlife Incident Report (WIR) system and assessed if further action is necessary. Depredation response includes verification, assessment of available preventative methods and possible issuance of depredation permit. Depredation permits are valid for 10 days and can be filled by the landowner, an agent of the landowner, or an APHIS WS agent. Distance from initial depredation site is limited in the permit to ensure that only depredating cougars are taken. Depredation cougars taken on permit are turned over to CDFW for necropsy and disposal. Results of all depredation permits are entered into the WIR system.

Potential Human Conflicts are evaluated for potential threat to public safety through a Response Guidance Team (RGT). If public safety is not threatened, non-lethal options are used to remove cougar from conflict area. RGT approves any relocation, placement, or rehabilitation if necessary. CDFW officials are to remain on site until released by the RGT. If the cougar is deemed a Public Safety Wildlife conflict, lethal removal by CDFW official or a public safety peace officer is completed as quickly and humanely as possible. Public Safety Wildlife conflicts not involving attack on a human are processed with notification to the RGT and information entered into the WIR. Public Safety Wildlife conflicts involving attack on a human are treated as a crime scene, following an Incident Command System through the completion of the investigation and subsequent removal of threat and reported into the WIR system.