RECOMMENDED BEST PRACTICES FOR RESPONSE TO, CARE AND RE-WILDING OF MOUNTAIN LIONS IN CALIFORNIA

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DEFINITIONS

For this publication, the following definitions shall apply:

AGENT(S): Qualified individual, educational institution, governmental agency, or nongovernmental organizations acting in an official capacity.

CHRONIC LIVESTOCK DEPREDATION: Continued loss of wildlife after attempts to contain livestock and/or failed attempts to haze depredating animal away from livestock.

FACILITY: The place where a mountain lion may be admitted for care, including wildlife hospitals, licensed individual rehabilitators, veterinary clinics.

DEPARTMENT: California Department of Fish and Wildlife

DEPREDATION: Injury or damage to private property, such as the killing of livestock.

DEPENDENT YOUNG: Mountain lion kittens that are dependent on their mother for survival.

LIVESTOCK: Any ratites, horses, mules, jackasses, cattle, bison, llamas, alpacas, sheep, goats, swine, domesticated fowl, any fur-bearing animal bred and maintained (commercially or otherwise) within pens, cages and hutches, bison and working dogs.

NON-INJURIOUS HARASSMENT: Scaring off animal without doing bodily harm. Includes, but is not limited to, firing shots in the air, making loud noises or otherwise confronting the animal.

NON-LETHAL INJURIOUS HARASSMENT: Scaring off animals by using methods that inflict some degree of physical pain without permanent damage or killing the animal.

NON-LETHAL PROCEDURES: Procedures that may include, but are not limited to, capturing, pursuing, anesthetizing, temporarily possessing, temporarily injuring, marking, attaching to or surgically implanting monitoring or recognition devices, providing veterinary care, transporting, hazing, rehabilitating, releasing, or taking no action.
POSESSION: The act of maintaining or having control over an animal. Possession includes situations where the animal is dead or alive and in the control of a person.

POTENTIAL HUMAN CONFLICT: Describes a situation that may exist before a lion becomes an actual public safety threat. For example, where a lion is found in an urban setting, hiding and not an immediate threat to public safety.

PUBLIC SAFETY: Refers to a situation involving a mountain lion that is exhibiting one or more aggressive behaviors directed toward humans that is not reasonably believed to be due to the presence of humans; or a mountain lion demonstrating aggressive action that has resulted in physical contact with a human; or a mountain lion posing an immediate threat to public health and safety, given the totality of the circumstances. This includes situations where a mountain lion remains a threat despite efforts to allow or encourage it through active means to leave the area.

REHABILITATION: This refers to bringing an injured adult, injured sub-adult, or orphaned or injured dependent young into captivity for recovery from injury or health issue for subsequent release into the wild.

RELOCATION: Animal is moved to suitable habitat. Relocation requires consultation with other federal, state, or private landowners in order to determine suitable habitat.

RESPONDER: A Department employee or otherwise authorized agent who is first on scene. For an event requiring the Incident Command System, the Incident Commander or his/her designee would be the official representative of the Department.

RESPONSE GUIDANCE TEAM: The Response Guidance Team (RGT) was established by the Department to provide assistance and guidance related to policy level decisions only for potential human conflict situations or public safety situations. The RGT is available to help evaluate a situation and provide personnel to assist as needed. The RGT consists of the Chief of Wildlife Branch, Chief of Law Enforcement Division, Deputy Director of Wildlife and Fisheries Division, a representative from the Wildlife Investigations Lab, Regional Manager/District Assistant Chief where the activity/incident is occurring, the Deputy Director of the Office of Communications, Education, and Outreach (OCEO) or their named designees.

SIGHTING: An animal is seen by the public and is not displaying unusual behavior.

SUB-ADULT MOUNTAIN LION: A mountain lion that appears nearly full-grown, based on size, appearance, and behavior. These are considered to be mountain lions that are not young-of-the-year and are at or near the age of independence from the mother. Sub-adults may travel with the mother, but are considered capable of surviving on their own in the absence of the mother.

RESIDENT: A mature lion with an established home range.
TRANSIENT: A mountain lion that does not have an established home territory.

Wildlife Incident Reporting (WIR): This is an electronic reporting system to report and track incidents related to wildlife-human interactions.

WORKING DOG: Guarding dog or herding dog.

**INTRODUCTION**

**GENERAL DISCUSSION**

In 1990, with the passage of Proposition 117 - the California Wildlife Protection Act, mountain lions were reclassified as a “specially protected” species (Fish and Game Code Section 4800).

Habitat protection is essential to genetic diversity and long-term survival of the large cats. Proposition 117 created a Habitat Conservation Fund (HCF) and directed legislature to spend no less than $30 million a year on wildlife habitat for the next thirty years.

Additionally, Proposition 117 banned sport hunting of lions. In California, then, mountain lions may not be taken, injured, possessed, transported, or imported except under specific circumstances related to depredation, public health and safety, to protect sensitive bighorn sheep populations, and other purposes as described in Division 4, Part 3, Chapter 10 of the Fish and Game Code. Fish and Game Code Section 1001) also allows for them to be euthanized to prevent or relieve suffering.

In 2014, new legislation introduced by Senate Bill 132 (Hill), requires the Department to utilize non-lethal options when responding to mountain lion encounters where there is no immediate threat to human life. It also gives the Department the power to authorize qualified individuals, educational institutions, and NGO’s to assist in implementing non-lethal procedures, when appropriate.

The current estimate of the mountain lion population in California is between 4,000 and 6,000, with densities varying from zero to 10 lions per 100 square miles.

Although it is an elusive species and mountain lions normally try to avoid humans, encounters do occur.

For the purpose of this document, interactions are categorized into 6 levels, each requiring a different response/ they are: Sighting, Potential Human Conflict, Public Safety, Injured or Orphaned, Nuisance, and Depredatory. Each category of encounter is responded to differently.
MOUNTAIN LION ENCOUNTERS AND INITIAL RESPONSE

SIGHTINGS

A sighting is when a mountain lion is observed and where there is no immediate indication of it being a threat to human safety or requiring rescue. The validity of a sighting should be confirmed through conversation with the reporting parting (RP).

The key to drawing out the facts lies in how questions are posed. For example, instead of asking if the animal had a long tail, the party should be asked to describe the animal’s tail. Ask if they saw the entire body of the animal and, if so, could they describe it.

Asking the RP to describe any markings and the approximate size of the cat will help determine its age. Again, instead of asking them if the animal was small or large, give them something to compare it with, like a cat or dog, asking if it appeared to be the size of a large housecat or as large as a German shepherd. Also ask about the animal’s behavior – what it was doing and how it reacted to their presence.

Documentation of sightings can prove valuable. Information to collect from a reporting party should include the date and time of day, and where, exactly the animal was observed. If they provide a street address, ask them to describe where on the property it was seen.

In case it’s useful, there are a couple of user-friendly apps available for smart phones: Theodolite and GeoCam. Both record photos and GPS coordinates.

Mapping applications, like Google Maps and Google Earth, can be helpful in “walking” through a site with the RP, helping draw out details. These applications can also help track sightings, using markers and labels. See an example of documentation below:

<table>
<thead>
<tr>
<th>Reporting Party: John Smith</th>
<th>Date: 4-1-14</th>
<th>Date of Sighting: 4-1-14</th>
<th>Time: 06:30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone: 888-555-1212</td>
<td>Address: (optional)</td>
<td>Location: Canyon Road and Cliff Drive</td>
<td></td>
</tr>
<tr>
<td>County: Los Angeles</td>
<td>Details: Observed crossing street from driveway of 222 Canyon Road toward open field.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Details about the animal’s location, appearance, behavior, and direction of travel can help experts determine the course of action.

Some sightings may require a greater response, such as posting of Warning Signs, advising residents that a lion has been seen in the area. If details suggest the animal might become a threat to people, livestock or pets, a more serious response should be considered, such as a meeting with residents and neighbors to discuss non-lethal, protective measures to reduce the potential for a human/mountain lion conflict. See recommendation under Nuisance, below.

POTENTIAL HUMAN CONFLICT GUIDELINES

NOTE: The following directives are based on the California Department of Fish and Game Department Lion Policy (March 2013) and are meant for Department employees or the Department’s officially authorized representative(s).

All Potential Human Conflict and Public Safety incidents shall be entered into the Wildlife Incident Reporting (WIR) system as immediately as possible. Personnel involved with the initial response shall be required to complete the WIR.

Among other factors, a mountain lion’s behavior, actions, and location may be taken into account when evaluating an incident involving a mountain lion where it is not posing an immediate threat to humans. This new (2014) category (Potential Human Conflict) allows personnel the time to evaluate the situation and consult with the RGT before a decision is made on the next steps. If the RGT cannot be reached, the Department employee or designated representative is authorized to take appropriate action.

A mountain lion deemed to be a Potential Human Conflict animal may be re-classed to a Public Safety mountain lion if the situation and conditions change, upon which reclassification the Public Safety Wildlife Guidelines shall be followed.

The Responder is charged with exercising best professional judgment in making decisions in the zone between potential and actual public safety threat.

Once an animal is deemed a Potential Human Conflict animal the following steps should be considered:

A. The Responder shall contact their supervisor or one member of the RGT, who in turn will contact the full RGT.
B. Provide the information as identified in the Wildlife Conflict Evaluation Form to assist in communication with the RGT.

C. The RGT, Responder and Department personnel on site will discuss non-lethal options that include but are not limited to the following options: tranquilizer darts, Taser, aversion tactics, bean bags, rubber bullets, pepper spray, catch pole and cage, trained aversion dogs, and assistance from approved non-governmental organizations (NGOs).

With additional capacity necessary, the Department may establish and maintain common housing points within each Region for non-lethal option equipment to expedite employing equipment in the field for responder use.

NOTE: The Department requires additional authority before relying on NGO assistance.

D. During and after non-lethal options are exercised, the Responder(s) and Department personnel on site shall maintain vigilance, evaluating the effectiveness and potential next steps.

So long as the subject animal(s) remains a Potential Human Conflict, then the on site responder(s) shall continue to pursue non-lethal options.

E. Department will maintain an official on site until released by the RGT or relieved by additional personnel.

PUBLIC SAFETY GUIDELINES

The Department’s foremost consideration is the protection of human life. Responding to public safety wildlife incidents are a priority for the Department and a Public Safety mountain lion shall be humanely euthanized as quickly as possible by a Department official or a public safety peace officer.

Public Safety Wildlife Response (No Attack on a Human)

NOTE: The following directives are based on the California Department of Fish and Game Department Lion Policy (March 2013) and are meant for Department employees or the Department’s officially authorized representative(s).

A. Secure the scene.

B. Humanely kill the Public Safety mountain lion with lethal take methods.
C. Notify Dispatch and the RGT.

D. Gather information for report and enter into the WIR.

Public Safety Wildlife Response (Attack on a Human)

A. Secure the scene and ensure proper medical aid if there is a victim. Identify the victim and obtain the following minimal information about the victim: name, address, phone number.

B. Notify the appropriate Dispatch Center. Dispatch shall notify the field investigator's supervisor, the appropriate regional manager and assistant chief, the Deputy Director WFD, Chief of Enforcement, Chief of WLB, the WIL, the Wildlife Forensics Lab (WFL), OCEO, and the local law enforcement agencies.

C. Initiate the Incident Command System (ICS). If a human death has occurred, a Law Enforcement Division supervisor or specialist will respond to the Incident Command Post and assume the Incident Commander (IC) responsibilities.

The IC holds initial responsibility and authority over the scene, locating the animal, its resultant carcass, and any other physical evidence from the attack. The IC will ensure proper transfer and disposition of all physical evidence.

D. Treat the area as a crime scene. In order to expedite the take of the offending animal and preserve as much on-scene evidence as possible the area of the incident must be secured immediately by the initial responding officer. The area should be excluded from public access by use of flagging tape or similar tape (e.g., "Do Not Enter") utilized at crime scenes by local law enforcement agencies. One entry and exit port should be established. Only essential authorized personnel should be permitted in the excluded area. A second area outside the area of the incident should be established as the command post.

E. In cases involving a human death, WFL personnel will direct the gathering of evidence. Secure items such as clothing, tents, sleeping bags, objects used for defense during the attack, objects chewed on by the animal, or any other materials which may possess the attacking animal's saliva, hair, or blood.

F. If the victim is alive, advise the attending medical personnel about the Carnivore Attack-Victim Sampling Kit for collecting possible animal saliva stains or hair that might still be on the victim. If the victim is dead, advise the medical examiner of this evidence need. This sampling kit may be obtained from the WFL.
G. It is essential to locate the offending animal as soon as practical. The assistance of USDA Wildlife Services (WS) may be arranged by the regional manager, assistant chief or designee, by contacting the local WS District Supervisor.

If possible, avoid shooting the animal in the head to preserve evidence.

H. If an animal is killed, the IC will notify the appropriate Dispatch Center. Treat the carcass as evidence. Use clean protective gloves and (if possible) a facemask while handling the carcass. Be guided by the need to protect the animal's external body from: loss of bloodstains or other such physical evidence originating from the victim; contamination by the animal's own blood; and contamination by the human handler's hair, sweat, saliva, skin cells, etc.

Tape paper bags over the head and paws, and then tape plastic bags over the paper bags. Plug wounds with tight gauze to minimize contamination of the animal with its own blood. Place the carcass inside a protective durable body bag (avoid dragging the carcass, if possible).

I. WFL will receive from the IC and/or directly obtain all pertinent physical evidence concerning the primary questions of authenticity of the attack and identity of the offending animal. WFL has first access and authority over the carcass after the IC. WFL will immediately contact and coordinate with the county health department the acquisition of appropriate samples for rabies testing. Once WFL has secured the necessary forensic samples, it will then release authority over the carcass to WIL for disease studies.

J. An independent diagnostic laboratory approved by WIL will conduct necropsy and disease studies on the carcass. The WIL will retain primary authority over this aspect of the carcass.

K. In the event that a Public Safety Wildlife animal cannot be located and taken and the immediate threat no longer exists, the RGT shall re-assess the Public Safety Wildlife status of the animal.

DEPREDATORY

The Department’s current protocol is to respond to reports of potential mountain lion depredation within 48 hours and enter such reports into the WIR system.

The responding Department employee, under the authority of his/her Regional Manager or Assistant Chief of Enforcement, or his/her designee, will verify the validity of the complaint and preliminarily determine the appropriate action according to the following criteria.

Confirmation of Depredation and Issuance of a Depredation Permit
Reports of mountain lion depredation must be verified by the Department, or by a Department authorized animal damage control officer. A non-Department animal damage control officer may only serve this function if the other officer’s agency or governmental entity and the Department have previously entered into a written agreement specifying protocols and the delegation of authority conditions. The Department responder shall confirm within 48 hours if a depredation from a mountain lion has occurred.

If the Department employee or authorized agent confirms depredation by a mountain lion, the Department may issue a depredation permit. Conditions which may be considered before issuing a depredation permit include:

Note: the following section was inspired Oregon’s wolf management plan, which can be found at http://www.dfw.state.or.us/OARs/110.pdf

In situations of chronic livestock depredation, lethal take may be implemented through the issuance of a Depredation Permit. However, a number of conditions shall be considered before a permit is issued. Information to be documented and considered before issuing a depredation permit include:

- Livestock or pet owners have worked to reduce mountain lion conflict, which has included:
  - Adequate predator-proof housing for pet(s) and or livestock.
  - Appropriate management practices for pet(s) and or livestock. For example, not allowing animals to run free.

- Confirmation by Department employee or authorized agent of at least one additional qualifying (see definition) incident of depredation by the same mountain lion within the previous 6 months.

- Use of non-lethal or non-injurious measures to prevent damage caused by animals prior to requesting the permit.

- Commitment by responsible party to implement corrective measures to prevent future occurrence of the damage.

- The likelihood the situation of depredation to remain chronic despite corrective actions and use of non-lethal conflict deterrence measures.

- The mountain lion identified for removal is one that the Department employee or authorized agent believes to be associated with additional qualifying depredations, the removal of which
the Department or agent believes will decrease the risk of chronic depredation.

**Preventative action**

When responding to depredation complaints, the Department shall advise property owners of measures to reduce the potential for attracting mountain lions to their property and confinement and protection of livestock and pets to reduce or minimize damage. They may also provide contact information to local resources or a referral service where they can find assistance in protecting their property and livestock.

**Oral Authorization**

Per Fish and Game Code Section 4805, oral authorization to pursue and take a depredating mountain lion may be granted.

**Immediate Take**

Per Fish and Game Code Section 4807, any mountain lion that is encountered while in the act of pursuing, inflicting injury to, or killing livestock, or domestic animals, may be taken immediately by the owner of the property or the owner's employee or agent. The taking shall be reported to the Department within 24 hours.

**Terms and conditions of mountain lion depredation permits**

Only one mountain lion may be taken under a depredation permit. In order to ensure that only the depredating lion is taken, the permit shall:

1. expire 10 days after issuance;
2. authorize the permittee to begin pursuit of the depredating mountain lion not more than one mile from the depredation site;
3. limit the pursuit of the depredating mountain lion to within a 10-mile radius from the location of the reported damage or destruction.

If damage continues to occur following the killing of a mountain lion under a permit, the Department may issue an additional depredation permit, or Fish and Game Code Section 4807 may allow for immediate additional take.

**Tracking of depredation permit**
Upon concluding the depredation incident, the responder shall complete the reporting requirement within the WIR application and close the incident. All reporting shall be complete not more than 3 business days after the incident.

**Retrieval of a depredation mountain lion**

Regulation (Title 14, Section 402) requires a mountain lion killed under a depredation permit be tagged and turned over to the Department for necropsy. Upon taking a depredation mountain lion into possession, the Department responder shall contact the WIL for guidance on storage, necropsy and/or delivery of the carcass.

After a mountain lion is necropsied, the Department shall dispose of the carcass by incineration, burial at a secure location, or as provided for in Fish and Game Code Section 4800 (b)(3).

**DISPLACED**

Mountain lions can become displaced, ending up in urban areas. Relocation of these otherwise healthy individuals may be an option, but requires approval of the RGT. Release to an approved site requires consultation with relevant federal, state, and local government entities, and private landowners as necessary.

**SICK, INJURED, AND ORPHANED**

In cases where a Potential Human Conflict mountain lion is found to be sick, injured or orphaned, the Responder will consult with the RGT before a decision is made on the next steps. If the RGT cannot be reached, the responder is authorized to take appropriate action.

For injured adults, sub-adults, and dependent young, which may be candidates for rehabilitation, the animal may be transported to an approved facility for evaluation and potential release or placement. The RGT must approve this decision.

**NOTE: The Department requires additional authority to rehabilitate mountain lions.**

Wild animals receiving rehabilitative care for injury or illness require varying degrees of exposure to humans as they go through treatment. Adult wild animals have an innate fear of humans that they maintain through convalescence. Young animals, however, are at risk of imprinting and becoming habituated to humans, especially those with serious injuries requiring a great deal of handling and interaction. A wild animal that is imprinted or habituated cannot be released. Therefore, only certain animals will be candidates for rehabilitation.
Injured or ill adult and sub-adult lions are excellent candidates for rehabilitation and re-wilding.

Healthy orphaned cubs as young as 5 months have been successfully raised and released, but extra care was taken to keep them wild. With an appropriate facility and expert care, mountain lion cubs that are orphaned but otherwise healthy, are candidates for rehabilitation.

Injured cubs that are 10 months or younger requiring hospital stay and extensive treatment, meaning repeated handling, may not be good candidates for rehabilitation.

By a certain age, lion cubs will have developed their natural fear of humans. When considering captive placement of a young lion, as in zoo or museum, great consideration must be given to the quality of life this animal might have. Euthanasia may be more humane than placement. The Department may consult with outside specialists in making the decision to place a mountain lion.

The Wildlife Investigations Lab (WIL) coordinates placement of wildlife with permitted facilities. No mountain lion shall be authorized for release or captive placement in another state without the advance approval of the RGT, the Director, and that state’s wildlife agency.

**ESTIMATING AGE AND EVALUATING CONDITION**

**IS THE ANIMAL SICK, INJURED OR ORPHANED?**

When assessing an animal, consider its overall condition. Does it appear very thin or in good shape? Ask yourself, Why is it where it is?

With an injured animal, signs of trauma should be fairly apparent, such as a broken limb, an open wound and bleeding.

An emaciated adult animal with no apparent injury indicates a greater problem, possibly illness. Signs of illness can include a milky discharge from the eyes and/or nose, weakness, disorientation. Sparse hair, especially on its face, may indicate mange and possible exposure to poison.

Mountain lion cubs stay with their mothers until there are well over a year old and nearly the size of an adult. In evaluating the animal and the circumstances, consider if the animal has been separated from its mother. A very thin cub could indicate it’s been without her for sometime, perhaps she was killed, whereas a very healthy, well-fleshed cub could indicate recent separation.
AGE CLASSIFICATION

Mountain lions can be divided into three basic groups: Kittens, Sub-adults, and Adults. Mature lions can be separated into 5 groups.

NOTE: this is from Field Guide to Texas Mt Lions and *The Mountain Lion in Nevada*, Nevada Department of Wildlife, 1983. Washington stats.

**KITTENS:** (0-16 MONTHS)
- Body weight: 2 mos. = 10 Lbs., 4 mos. = 20 Lbs., 6 mos. = 40 Lbs. 8-10 mos. ~ 60 Lbs. At a year of age, males can way 100 Lbs, while females will be around 70 Lbs.
- Eyes are blue at birth and begin changing at 4 months. They are golden brown by 17 mos.
- Spots on pelage – fading begins by 3 to 4 months of age.
- Dependent on adult female.
- Baby teeth present or permanent teeth in the process of erupting.
- Even if all permanent teeth are present, canines are not fully grown – canine length under 28 mm in males and under 23 mm in females.

**SUBADULT:** (17-23 MONTHS)
- Spots on pelage still visible on inside of front legs.
- May or may not be with adult female.
- Not sexually mature – females not nursing.
- Teeth are ivory white, not stained.

**ADULTS:** (24 MONTHS AND OLDER)
- Males: ≥ 130 Lbs. Females: 90 Lbs.
- Only males exceed 115 pounds
- Pelage has no spots or only very faint spots.
- Independent of mother.
- Sexually mature – evidence of nursing in females, e.g. large teats (may not be evident in young females just entering this age group).
- Tooth wear and staining.
2 YEARS OLD

- Canines are white, no stains.
- No wear on first and second incisors; third incisor may show slight wear.
- Tips of canines show little wear.

3 AND 4 YEARS OLD

- Canines lightly stained.
- Slight wear on third incisor at highest point of crown. Area of wear averages 1-4 mm across.
- First and second incisors show little or no wear.
- Tips of canines show little or no wear.

5 AND 6 YEARS OLD

- Canines show moderate staining.
- Third incisor worn to within 1-4 mm of top of first and second incisors.
- Incisors #1 and #2 have little to moderate wear along crown.
- Tips of canines show obvious wear.

7 TO 9 YEARS OLD

- Canines show dark staining.
- Third incisor often worn level with first and second incisors down to 1-4 mm above gum line.
- Tips of canines nearly rounded or flattened.
- Dentine exposed on incisors.

10+ YEARS OLD

- All incisors worn nearly to gum line, or missing.
- Canines worn to a rounded or blunt shape and darkly stained.
# MOUNTAIN LION AGE, SEX, AND CLASSIFICATION

<table>
<thead>
<tr>
<th>Weight (pounds)</th>
<th>Male Age</th>
<th>Male Class</th>
<th>Female Age</th>
<th>Female Class</th>
<th>Notes</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>2mo</td>
<td>Kitten</td>
<td>2mo</td>
<td>Kitten</td>
<td>Spots very evident</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>4mo</td>
<td>Kitten</td>
<td>4mo</td>
<td>Kitten</td>
<td>Spots evident</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>5mo</td>
<td>Kitten</td>
<td>5mo</td>
<td>Kitten</td>
<td>Spots somewhat evident (hip area)</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>6mo</td>
<td>Kitten</td>
<td>6mo</td>
<td>Kitten</td>
<td>No spots. Double canine (perm is shorter)</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>7mo</td>
<td>Kitten</td>
<td>8mo</td>
<td>Kitten</td>
<td>Double canine (~equal length)</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>8mo</td>
<td>Kitten</td>
<td>10mo</td>
<td>Kitten</td>
<td>Perm canine ¾ erupted</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>9mo</td>
<td>Kitten</td>
<td>12mo</td>
<td>Sub-adult</td>
<td>No yellowing on teeth</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>10mo</td>
<td>Kitten</td>
<td>14mo</td>
<td>Sub-adult</td>
<td>No yellowing on teeth</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>11mo</td>
<td>Kitten</td>
<td>24mo</td>
<td>Sub-adult</td>
<td>No yellowing on teeth</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>12mo</td>
<td>Sub-adult</td>
<td>Over 24mo</td>
<td>Adult</td>
<td>No yellowing on teeth</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>14mo</td>
<td>Sub-adult</td>
<td>Over 24mo</td>
<td>Adult</td>
<td>No yellowing on teeth</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>18mo</td>
<td>Sub-adult</td>
<td>Over 24mo</td>
<td>Adult</td>
<td>Light yellowing on teeth</td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>24mo</td>
<td>Adult</td>
<td>unlikely</td>
<td></td>
<td>Light yellowing on teeth</td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>Over 24mo</td>
<td>Adult</td>
<td>unlikely</td>
<td></td>
<td>More yellowing on teeth (at 4 yrs. yellow is prominent)</td>
<td></td>
</tr>
</tbody>
</table>

- Double canine references to the deciduous canine and the permanent adult canine being present for a short time.

- Only males get above 115 pounds.
# AGE AND INJURY CRITERIA FOR THE FIELD

<table>
<thead>
<tr>
<th>Condition Description</th>
<th>Mountain Lion Cub (Age)</th>
<th>Sub-Adult (Age)</th>
<th>Adult (Age)</th>
</tr>
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<tbody>
<tr>
<td>&lt; 5 mos.</td>
<td>T, PL</td>
<td>T, R</td>
<td>T, R</td>
</tr>
<tr>
<td>5 – 8 mos.</td>
<td>T, R</td>
<td>T, R</td>
<td>T, R</td>
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<tr>
<td>8 - 10 mos.</td>
<td>T, R</td>
<td>T, R</td>
<td>T, R</td>
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<tr>
<td>&gt; 10 mos.</td>
<td>T, R</td>
<td>T, R</td>
<td>T, R</td>
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<tr>
<td>&gt; 18 mos.</td>
<td>T, R</td>
<td>T, R</td>
<td>T, R</td>
</tr>
<tr>
<td>Signs of illness, thin, weak, discharge from nose / eyes.</td>
<td>E</td>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td>Trauma, unable to use back legs</td>
<td>E</td>
<td>T, R</td>
<td>T, R</td>
</tr>
<tr>
<td>Trauma, 1 fx limb</td>
<td>E</td>
<td>T, R</td>
<td>T, R</td>
</tr>
<tr>
<td>Trauma, 2 broken limbs</td>
<td>E</td>
<td>T, R</td>
<td>T, R</td>
</tr>
<tr>
<td>Blind or partial blindness</td>
<td>E</td>
<td>T, R</td>
<td>T, R</td>
</tr>
<tr>
<td>Healthy</td>
<td>RE, PL</td>
<td>RE, R</td>
<td>H, REL</td>
</tr>
</tbody>
</table>

E = Euthanize   H = Haze   PL = Placement   R = Rehabilitate   RE = Reunite   REL = Relocate   T = Transport
CAPTURE, HANDLING, AND TRANSPORT

AUTHORIZATION TO RESPOND

Prior to responding to an incident involving a potentially injured, orphaned, or displaced mountain lion, agents shall first fulfill all necessary requirements set by California Department of Fish and Wildlife pertaining to mountain lions. And agent’s first duty is to notify the Department of the incident.

No agent shall respond without prior authorization from the Department.

AUTHORIZATION TO POSSESS

Before admitting a mountain lion into a facility, administrators of that facility shall first fulfill all necessary requirements set by the Department pertaining to possession of mountain lions, which shall include immediate notification and prior authorization.

Under no circumstance shall a facility accept a mountain lion without first receiving authorization from the Department.

CAPTURE

Human safety comes first! Agents shall comply with all required human safety policies, including use of appropriate protective, appropriate equipment, and appropriate housing. These will be addressed in greater detail.

Never put yourself or anyone else in danger. If you are not comfortable handling the animal, please be honest and communicate that to Fish and Wildlife and or the rescuing wildlife group. If you or your examiners are not comfortable handling the cat, Fish and Wildlife will take it to another facility that is.

TRANSPORT

Generally speaking, transport carriers should provide animals with enough room to maintain normal body posture while standing and just enough room to turn around.

Plastic dog kennels, or crates, come in a variety of sizes. These can be suitable for kittens to 6 month-old mountain lions. Be sure to use only the ones that lock together with nuts and bolts – not the kind that snap together. Cable ties can be used in place of nuts and bolts if necessary. (pic)
Larger individuals, especially un-sedated adults, can be temporarily contained in (Karen, can you add something here?)

Ideally, the transport vehicle will have a separate area, like the bed of a truck that has a shell, or the cargo area of a van. Mountain lions must not be transported in the open beds of trucks.

During transport, the ability to control ambient temperature in the transport carrier is critical to the safety and wellbeing of the animal.

Young, malnourished, wet, or sedated animals may require warmer temperatures, roughly 70 – 80 degrees, where healthy, conscious individuals may need to be kept at cooler temperatures.

Portable heating pads, like SnapHeat, can be used to keep animals warm. The pads can be placed under a lightweight towel, and off to one side so the animal can move off of the heat source as needed. These units emit heat for about 2 hours.

A plastic bottle wrapped in a lightweight towel will give off heat for approximately 20 minutes. Dry rice, microwaved (with no water) until it is hot, will provide heat for about 30 minutes. After being heated, the grains can be placed in a sock or pillowcase.

Animals requiring cooler temperatures can be kept comfortable using the vehicle’s air conditioning. If air conditioning is unavailable, moving air can keep an animal cool in a moderate climate. In extreme cases, the crate can be set on a bed of ice to cool the floor, or, in very extreme cases where the animal is at risk of hyperthermia, water can be used to dampen its coat.

In case of an emergency situation, the transport carrier should be labeled, indicating the type of animal inside. The driver must also have the appropriate documentation on hand.

INTAKE PROCEDURES

DOCUMENTATION AND RECORD KEEPING

Upon admission, collect complete and through information on where the animal was found, under what circumstances, how it was contained and by whom, including any and all phone numbers of the people, organizations, or agencies involved.

HUMAN SAFETY COMES FIRST, ALWAYS!

Below are some important steps to follow. Always remain quiet and calm. NEVER UNDERESTIMATE a mountain lion – not even a young one!
First thing you have to do is PREP your staff and your examination room for the intake of this cat. These animals are HIGH STRESS! Keep your noise levels down!

Determine who is going to work with the mountain lion. For safety reasons, always follow these guidelines:

- Always have at least two people for an exam.

- Examiners must be rabies vaccinated.

- Examiners should have at least five years of predatory mammal handling (i.e. adult coyotes, foxes and bobcats).

- Examiners must understand the dangers involved in handling large predators

- Examiners must be familiar with the behavior and natural history of the species involved.

Once the examiners are determined, it is time to set you exam room up! Have these key things on hand before your examination.

Have your sedative of choice on hand-first choice is Telazol; second choice is a combination of Ketamine and Xylazine (k/x or x/k). Refer to your clinic veterinarian for guidance

Telazol IM: 3-5mg/kg—always dose on the lower end for debilitated cats

If you do not have Telazol, use a combination of Ketamine/Xylazine. Ketamine is 10mg/ml, mixed with Xylazine at 1mg/kg.

Artificial tears (remember they cannot blink while sedated, you must keep their eyes moist)

Selamectin (Revolution)- dose is 45mg per 5.1-15 pounds

Place a clean sheet or towel on your exam table

Have leather gloves and extra blankets/towels on hand

Is the animal going to a recovery crate post exam? If so have the kennel setup before you begin the initial examination

Capture your cat for exam. The best-case scenario is the cat is already contained by the rescuing party. This is generally done using a large net with drawstring. From there the cat is placed in a large kennel. I’m sure you’re asking, “Well how am I going to get the cat out of the kennel?” The answer is using a “squish” technique. The whole reason behind this technique is safety! This technique will allow you to tranquilize the animal with no handling.

Another great technique is using a Sryinge Pole. This device will keep a safe distance between you and the animal, while allowing you to inject the cat with your sedative of choice.
The amount of sedative used will depend on the weight and overall health of your animal. Please refer to your clinic veterinarian for dosages and drug of choice.

Once you have your cat sedated it is time to start your examination!

**PHYSICAL EXAM AND EVALUATION**

**INITIAL EXAMINATION**

Just like most animals that come to a wildlife rehabilitation hospital, you want to start with a head-to-toe examination. During this examination, hospital staff should be preparing an enclosure for the animal to be placed in after the exam.

Here is an easy guideline for assessing your cougar:

- Since the animal will most likely be sedated, be sure examiners monitor the cat’s respiration closely.
- Weigh the animal in kilograms.
- Examine each ear- check for blood, discharge, mites etc.
- Look at their eyes (remember pupils will be dilated if cat is under sedation).
- Check mouth: color, condition of teeth etc. If time permits, take a picture of the teeth to help determine age if it is in question.
- Palpate right and left front legs and paws: check for fractures, condition of foot pads and nails.
- Palpate spine and assess body condition by using the provided “Body Condition Score” chart, or BCS: Provided courtesy of Nestle Purina company.
- Check skin turgor to assess level of dehydration. You can either pick subcutaneous fluids or IV. Only give IV fluids if you have a veterinarian or trained veterinary technician on site.
- Palpate rear legs for fractures, evaluate foot pads and nails.
- Palpate tail
- Determine gender
- Monitor for external parasites: treat as needed.
- If time allows, document measurements of the cat, as this might be valuable to have in the future.
AGE AND INJURY CRITERIA FOR THE HOSPITAL

Cubs that are 10 months of age and under will require extreme isolation to avoid habituation to humans. Injured (broken bones) will require hospital care which makes ‘isolation’ from humans very difficult. When caring for adult mountain lions, isolation is still very important but it is hard to ‘undo’ their wildness with a few months in captivity, but with younger lions, especially those under 10 months, it may be difficult to prevent habituation.

The following is criteria for medical staff after examination of the mountain lion:

- If the injury will leave the lion with even the slightest disability, the animal shall be immediately euthanized.

- A mountain lion determined to be permanently blind or deaf, even partially so, shall be immediately euthanized.

- If surgery is indicated and being considered, is the veterinarian "reasonably" confident that it will be successful and will leave no disability? If not, the mountain lion shall be euthanized.

- If the mountain lion has a fracture in two or more legs, regardless of how repairable they may be, the mountain lion shall be euthanized.

- Surgery referred to as an FHO (Femoral Head Osteotomy) should not be conducted due to the extended healing time necessary and the poor potential for proper false joint growth. (The mountain lion will panic when you enter for cleaning, etc. and will place excessive stress on the joint under repair).

- If a fracture requires a KE (external fixation device), surgery shall not be undertaken unless the mountain lion can be safely housed in an appropriate enclosure that will keep the KE from catching on anything and be ripped out (i. e. no chain link or wire).

- If there is a preponderance of evidence, either circumstantial or actual, that an injured mountain lion was responsible for predation of any domestic animal or livestock, that mountain lion shall be euthanized without regard to the extent of injuries.
Body Condition System

1. Ribs visible on shorthaired cats; no palpable fat; severe abdominal tuck; lumbar vertebrae and wings of ilia easily palpated.
2. Ribs easily visible on shorthaired cats; lumbar vertebrae obvious with minimal muscle mass; pronounced abdominal tuck; no palpable fat.
3. Ribs easily palpable with minimal fat covering; lumbar vertebrae obvious; obvious waist behind ribs; minimal abdominal fat.
4. Ribs palpable with minimal fat covering; noticeable waist behind ribs; slight abdominal tuck; abdominal fat pad absent.
5. Well-proportioned; observe waist behind ribs; ribs palpable with slight fat covering; abdominal fat pad minimal.
6. Ribs palpable with slight excess fat covering; waist and abdominal fat pad distinguishable but not obvious; abdominal tuck absent.
7. Ribs not easily palpable with moderate fat covering; waist poorly discernible; obvious rounding of abdomen; moderate abdominal fat pad.
8. Ribs not palpable with excess fat covering; waist absent; obvious rounding of abdomen with prominent abdominal fat pad; fat deposits present over lumbar area.
9. Ribs not palpable under heavy fat cover; heavy fat deposits over lumbar area, face and limbs; distention of abdomen with no waist; extensive abdominal fat deposits.

Call 1-800-222-VETS (8387), weekdays, 6:00 a.m. to 4:30 p.m. CT
NOTE: The following information was provided by Karen Ziegler-Meeks, Wildlife Manager at the White Oak Conservation Center. White Oak has experience with 14 Florida panthers that were returned to the wild, as well as 4 non-releasable panthers.

Factors most important for successful rehabbing of panthers:
- Large naturalistic enclosures
- Minimal human contact
- No established routines
- Natural food items

HOUSING

Temporary Confinement (transport). Cubs that are younger than 6 months can be temporarily housed and transported safely in an appropriately sized pet carrier. The animal must have enough room to maintain normal body posture and be able to turn around without hitting the sides.

Larger, older mountain lions should be transported in (Karen could you add something here?)

Indoor Convalescent Pen. Hospital stay may be necessary for a very sick or injured panther that requires the injury to remain clean, fly-free & limited movement.

If your hospital stall is metal, fence, or wire they will chew on this and likely to break teeth. Cubs teeth will grow back as long as they do not do permanent damage to the mouth but if they break adult teeth it could mean they cannot be returned to the wild so you need to take this seriously.

A wood stall is better on their teeth but they can do serious damage to a wood stall in a short period of time. All edges / doorframes are likely to be chewed on and will likely require replacement. Do not have windows or skylights in the stall and its recommended to have a low ceiling as they may jump trying to get out and can re-fracture or cause an additional fracture.

A video camera system is highly recommended in the hospital stall as hospitalized animals require frequent monitoring but at the same time you want to minimize human exposure to the panther.

A dimmer light switch is helpful so you can give them light during the day but dim just enough for camera monitoring at night.
All cameras and lights need to be covered or they will destroy them.

Keeping the panthers on a low dose of Valium while confined to a small stall is important to keep them calm and resting so they can heal, otherwise they will continuously try to escape and risk more injuries.

You must have a shift stall as you will need to be able to clean the stall on a daily basis. Our hospital stall has a rubber-matted floor with no access to the edges for the panthers to tear up or eat. We also provide a wood pallet bed for them to rest on. If they use the bed the urine runs through the slats and the bed stays dry. You can even put towels under the bed to soak up urine as long as the panther does not have access to the towels. Straw bedding can sometimes be used but this takes more time to clean and would not be recommended if the panther has any open wounds. At White Oak, we spot clean when we can to minimize our time at the stall and to avoid wetting the entire stall each day. Do not put a crate in the stall for the panther to hide in as the animal is then out of camera view and if they are injured you do not want them to be able to get up on anything.

Do not use any rubber feed or water tubs in with the panthers. At White Oak, we use very hard plastic bowls or buckets that won’t damage their teeth and are more difficult to break. We have used a non-spill/tip dog water bowl (but remove the rubber ring on the bottom of the bowl that comes with it) with no problems. The edges are rounded and not as easy to grab or tip over.

Also consider a safe way to be able to give fresh water and food without having to open a larger door that could allow escape or injury to the keeper. Adult wild panthers be very aggressive.

**Small Outdoor Enclosure:** (1,242 sq ft + 2 shift areas ~200 sq ft ea) Lined on the inside w/wood slatted snow fencing to keep them from fence chewing.

Have two shift areas with cement floors to keep animals off dirt until negative for parasites.

Panther cubs usually only remain in this small enclosure for 1-2 months at the most. We do provide them with two hiding dens & a platform to lay on while in this small enclosure. Newly captured panthers are very nervous so giving them a hide area is very important for their wellbeing.

**The benefits of using a small enclosure:**

- Ability to monitor food & medication intake.

- Ability to collect a stool sample to ensure they are parasite free.

- Many will require an immobilization for a quarantine exam and vaccinations.
This small pen makes it much easier to net the cubs for the immobilization injection. The netting just reinforces their fear of humans. Netting cubs over 6-7 months of age gets to be challenging and more of an injury risk for both cats and staff.

- We have received cubs too small to wear a tracking collar (~15-20 lbs.) and this pen is covered to prevent escapes. We usually wait until they are about 25-30 lbs. before putting a cub collar on.

**The cons of using a small enclosure:**

- The smaller the enclosure, the harder they are going to try to escape!

- It is not possible to feed without them seeing humans, and young cubs require daily feeding.

- Since this pen is small we don’t feel we can avoid cleaning so we minimize cleaning to about 1x week and take that opportunity to collect a fresh stool and to see how well they have been eating carcasses.

- We rarely use this enclosure for adult panthers, as it can be difficult or impossible to shift them for pen cleaning and too dangerous to enter this small enclosure with an adult panther. And we have found that the adults are more likely to chew on or completely tear down the snow fencing.

- It is suggested that you design a hide box or room that they might prefer to hide in that they can be trapped in easily and then you can service the pen safely and out-of-sight of the panther.

**Half-Acre Conditioning Enclosure:** (with attached house/barn, overhang, trees near fence line tinned to prevent climbing).

This is a medium-sized enclosure that is very isolated, and heavily wooded like their natural habitat.

- This pen is perfect for both adults and cubs once they are deemed healthy. This pen allows us to still maintain some control and close monitoring but gives the panthers more privacy and ability to hide.

- This is a good interim enclosure for injured panthers that need more space to rehab their injury but not quite ready for the large enclosure.

- It also makes it easier for us to deliver food in a more secretive way.
- The panthers must have on a tracking collar in any open top enclosure in the event a tree were to fall on the fence line and allow an escape.

- It is important to make sure they are parasite free prior to entering this enclosure as this pen is only cleaned when the animal has been removed for an exam. The pen is never cleaned while a panther is in there as we are in strict protocol to avoid the area as much as possible. We also want to allow/encourage the panther to do natural behaviors such as burring their feces and left over food with grass and leaf litter.

- Panthers remain in this enclosure usually until the next collar enlargement and then moved to the larger pen (2-3 months).

**Pre-Release Re-Wilding Enclosure.** (suggested 12 acres) (with attached house/barn, overhang, trees near fence line tinned to prevent climbing). This is a large enclosure that is also very isolated, quite, and heavily wooded.

It is important to get rehab panthers into this enclosure ASAP so they can begin more natural behaviors, like ‘hunting’ for prey.

All outdoor enclosures have one or more trail camera that are set and checked as needed. It is likely that you will never ‘see’ the panthers once they are in this enclosure. The cameras will help you monitor the following:

- To ensure the panthers are still present in the enclosure.

- Are eating the food items that are offer (and not the buzzards!).

- Monitor food aggression/dominance with siblings or pen mates.

- Monitor body condition.

- Collar tightness as panther cubs may require 3 or more collar changes during their stay. If you have more than one panther in the same enclosure, it is highly recommended to spray paint their collars different colors (white, black, orange) so that you can tell the panthers apart on camera. Small cubs, prior to putting on a collar, can be shaved on shoulders or hips for ID.

**FEEDING**

Newly captured panthers (especially adults) may not eat for several days and do best if you can offer some sort of ‘fresh’ carcass meat they are used to eating.
We start out offering smaller food items daily and then gradually increase the amount offered and begin including fast days between large meals. You want them to learn to ‘cache” food for later. It is important to feed at different times of the day and at different locations so they have to search for food. Food should be delivered as quietly as possible (golf cart or walking). It may be necessary to drive a truck up to drop off large/heavy food items so make sure you occasionally drive near the pen without feeding so that the cats do not associate vehicle ‘noise’ with food.

With sporadic feedings, and many different food items, it can be easy to over or under feed the panthers so we keep a log of all food items/weights offered so we can be sure that we are offering enough food and a good variety. Growing cubs in a large enclosure require a lot of food! Also you want these panthers to have a bit of ‘extra’ weight upon release to carry them while they adjust to searching for food on their own. We alternate between live and dead food items to ensure they are getting plenty to eat as live animals may escape the enclosure or capture. Buzzards and crows have been seen eating on carcasses so smaller food items are offered in the building, under cover of some sort, or close to dark, as to not attract the ‘free-loaders”.

It is important that you feed occasionally in a ‘capture’ area (recommend a small building/corral) as you will need a way to catch them for medical procedures and/or eventual release.

Wild panthers (especially females that are more wary and less food motivated) can be difficult to capture by ‘hiding’ nearby to close a door. If you have a single panther in the enclosure you can set a trap in the corral area that when they enter the corral and grab a food item it will release the guillotine door, capturing themselves. This is not recommended with two or more panthers in the same enclosure as the guillotine door could hit the other cat. You could also set up a camera and a way to close the door from far away.

Several weeks (2-3 wks) prior to capture it is recommended that you Increase the frequency of corral feedings and a few days out (2-5 days) you should short feed them to increase your chances for a successful capture.

Make sure your corral doesn’t give them much opportunity for chewing on things that could break teeth. We do not leave the panthers in the corral for more than 24-48 hrs to minimize any risk. They are often captured the night 1-2 days prior to the medical procedure and/or release date.

If you are capturing for an exam then remember once caught in the corral it could be many weeks before they will re-enter this corral so don’t plan an exam too close to the need to capture for release.
We make every attempt to offer live food items or dead carcass meat (the same items they would eat naturally) but with the length of time the panthers spend with us it is often challenging to get enough carcass meat to feed for their entire stay so we supplement with processed meat (horse and/or beef).

When offering whole carcasses to young cubs we do ‘open’ up the carcass meat for them, less and less over time until we are confident they are able to tear the hide on their own.

An example of food requirements:

- Two young panthers that remained at WO for 10 months:
  66 quail, 77 chickens, 159 rabbits, 23 deer, 632 lbs of processed meat, etc....

- One young panther that remained at WO for 7 months:
  22 quail, 69 rabbits, 31 chickens, 9 deer, 216 lbs. of processed meat, etc...

- One adult panther that remained at WO for 14 months:
  62 quail, 42 chickens, 42 rabbits, ~30 deer, 270 lbs. processed meat, etc...

**PRE-RELEASE EVALUATION**

**RELEASE OPTIONS**

All our released panthers are monitored once released, some for many years, to assess the success of this program.
SAFETY GUIDELINES

If you live in cougar country

- Learn your neighborhood. Be aware of any wildlife corridors or places where deer concentrate.
- Walk pets during the day and keep them on a leash.
- Keep pets indoors at dawn and dusk. Shelter them for the night.
- Feed pets indoors.
- Don't leave food and garbage outside.
- Use animal-proof garbage cans if necessary.
- Remove heavy brush from near the house and play areas.
- Install motion-activated light outdoors along walkways and driveways.
- Be more cautious at dawn and dusk when cougars are most active.
- Do not feed any wildlife. By attracting other wildlife, you may attract a cougar.
- Keep areas around bird feeders clean.
- Deer-proof your garden and yard with nets, lights, fencing.
- Fence and shelter livestock. Move them to sheds or barns at night.

If You Recreate in Cougar Country

- Be aware of your surroundings at all times.
- Leave your dog at home or keep it on a leash. Pets running free may lead a cougar back to you.
- Hike in groups. Make noise to alert wildlife of your presence.
- Keep children close to you. Teach them about wildlife.
- Keep campsites clean. Sleep 100 yards from cooking areas.
- Store food in animal-proof containers.
- Carry deterrent spray.
- Be cautious at dusk and dawn.
- Never feed any wildlife. Prey attracts predators.
- Do not approach any wildlife; stay at least 100 yards away.
- Steer clear of baby wildlife. Mother is likely nearby.
- Be alert when sitting quietly or stopping to rest.
- Be especially alert at dawn and dusk when cougars are most active.
- Be aware that animal calls and animal kills can attract a cougar.

If You Encounter a Cougar

- Cougars often will retreat if given the opportunity. Leave the animal a way to escape.
- Stay calm and stand your ground.
- Maintain direct eye contact.
- Pick up children, but do so without bending down or turning your back on the cougar.
- Back away slowly.
- Do not run. Running triggers a chase response in cougars, which could lead to an attack.
- Raise your voice and speak firmly.
- If the cougar seems aggressive, raise your arms to make yourself look larger and clap your hands.
- If in the very unusual event that a cougar attacks you, fight back with rocks, sticks, tools or any items available.

MOUNTAIN LION NATURAL HISTORY

THE CYCLE OF LIFE
From Chapter Two of Cougar: The American Lion by Kevin Hansen:

Pregnant females do not prepare elaborate dens. It seems matter that it provides a refuge from predators (coyotes, golden eagles, other cougars) and shields the litter from heavy rain and hot sun. Dens rarely contain any bedding for the young, though a mothers soft belly hair was found in one. (This also contradicts the popular misconception, perpetuated largely by some nature movies, that cougars always choose caves as dens.)

Newborn mountain lions enter the world as buff brown balls of fur weighing slightly more than a pound. Biologists call them kittens or cubs either is correct. Their eyes and ear canals are closed, their coats are covered with blackish brown spots, and their tails are dark-ringed. This color pattern provides excellent protective camouflage.

Kittens begin nursing within minutes after birth and gain weight rapidly, with males tending to outpace females. Nursing mothers have eight teats but apparently only six produce milk. Kittens
start to compete for nipples the first day and generally suckle the same nipple whenever
nursing.(4)

At two weeks of age the kittens' eyes and ears are opened and they are able to walk. Within 10 to
20 days the kittens may weigh over two pounds. They begin to move awkwardly about, exploring
the rock overhang, brushy thicket, or pile of boulders that serves as their den.(5)

While suckling her young the mother must occasionally leave the den to hunt. This is the time of
her most restricted movement, because she does not want to venture too far from her vulnerable
kittens. Still, she must hunt to sustain herself and replenish her milk. While hunting the female
cougar remains within a fixed area called a home range. Varying in size from 25 to 400 square
miles,(7,8) home ranges are restricted areas of use in which cougars confine their movements
while hunting, searching for a mate, or raising young. Biologists refer to the cougars that occupy
home ranges as residents. Possession of a home range is critically important to a female cougar
because it increases her litter's chances for survival by guaranteeing an established hunting area for
the mother.

By the time kittens are weaned at 2 to 3 months, the mother has moved the litter to one or more
additional den sites throughout her home range. This provides greater protection for the young
and may be one reason she does not construct elaborate dens. In his book Soul Among
Lions, Arizona cougar specialist Harley Shaw explains that there are other advantages to such
behavior: "...kittens learn early to move around their range and not imprint upon a single home
site. Home is the entire area of use. Within it, lions are free to move, hunt, and rest as their mood
and physiology directs. They are not handicapped the human compulsion to return to a single safe
base at night. Home is a large tract of land that they undoubtedly come to know as you and I know
the floorplan of our house. They learn to be lions in this home area.(6)

The physical metamorphosis of young, growing cougars is dramatic, especially their teeth and coat.
Teeth are critical to a cougar's survival, so the teeth in young cougars develop quickly. Their large
canines (or fangs) allow them to capture and kill prey, while their specially adapted molars (called
carnassials) are used to cut through tissue while feeding. Canines first appear at age 20 to 30 days,
followed by the molars at 30 to 50 days. Permanent teeth start replacing primary (baby) teeth at
about 5 1/2 months. The permanent canines first appear at month eight, and for a short time both
permanent and primary canines are present.(3)

As an adult cougar's tawny coat provides camouflage while stalking prey, a kitten's spots provide
camouflage from predators. Kittens begin to lose these spots at 12 to 14 weeks, they fade rapidly
but are still obvious at 8 months, less so at one year. By 15 months the markings are visible only on
the hindquarters and only under certain light conditions. In some cougars, the stripes on the upper
foreleg are still visible at 3 years of age.(3,9)
The mountain lion's coat is not the only feature that changes color with age. Their eyes, light blue at birth, begin to change at four months and are the golden brown of adults by 16 to 17 months. (3,9)

GROWING UP AND LEAVING HOME

Female cougars probably begin leading their kittens to kills as early as 7 to 8 weeks. The mother also carries meat to her young from kills until weaning age (2 to 3 months), at which point the cubs weigh in at between 7 and 9 pounds. As the kittens grow older, the mother will leave them at kills, frequently for days at a time, while she goes in search of the next prey. (6) As the kittens grow and become stronger, the mother will range farther in search of prey.

Biologists have frequently noted how intensely a female with kittens uses her home range. This is most concentrated subsequent to birth, then expands as the kittens are able to accompany her to kills. It's easy to imagine an insistent mother as she drags, pushes, and urges her kittens along over the many miles between kills. She expends an enormous amount of energy feeding her growing litter. As a result, the density of prey in the mother's home range affects how well she can provide for her young, which in turn influences their likelihood of survival.

Arrival at a kill is a time of both feeding and play for kittens. Vegetation is frequently disturbed for 50 feet surrounding the carcass. Grass is flattened, limbs are broken off trees and trunks are covered with the kittens' claw marks. The carcass is more fully consumed than it would be by an adult lion alone, and pieces of hair and bone are scattered about. This rambunctious play by the young at a kill is another part of their training as predators. They will stalk, attack, and wrestle with their siblings or mother, as if they were the next meal rather than their own flesh and blood. Ultimately, though, play gives way to the real thing.

As they grow stronger and more skilled at stalking, kittens will separate from their mother for days at a time and hunt on their own. This growing independence is a precursor to young lions leaving their mother and going in search of their own home range. Biologists are not certain whether a mother and her young gradually grow apart, with the kittens gradually leaving of their own accord, or whether she abandons them as do female black bears with their young. Sonny Bass has found the latter to the case in Florida. "My experience with Florida panthers in the Everglades based on daily tracking) indicates that the mother leaves the young." (10) Seidensticker tells of one Idaho cougar that abandoned her kittens at a kill. (11) Paul Beier, who studied mountain lions in southern California, believes the mother discourages her kittens from remaining with her. "Some sort of agonistic behavior on the part of the mother is necessary to discourage the young from staying. Simply abandoning the young is not possible because they know where to find her." (12) The presence of mature resident males attracted to the female, who by now is in heat,
may also discourage the young from remaining. However they separate, the kittens are finally on
their own and the mother will come into heat and breed again.(6)

Kittens can survive on their own as early as 6 months, such as when the mother is killed or dies of
natural causes, but this appears to be rare. Typically, the young cougars will remain with their
mother for 12 to 18 months. This allows them to hone their hunting skills and gives them time to
develop their killing bite.(14) This bite is usually delivered to the back of the neck of large prey,
severing the spinal cord and causing almost immediate death. To be executed efficiently, the bite
requires practice and development of the cougar's powerful jaw muscles. Evidence seems to
indicate that the behavioral patterns of killing prey may be innate, but that selection of appropriate
prey and stalking may require practice to acquire the necessary skill.(1,2,6) This may explain why
young cougars are sometimes found with a face full of porcupine quills, or are the culprits in
attacks on domestic livestock.

The departure of young cats from their mother's home range is called dispersal, and it is a time
when the young cougars are especially vulnerable; they expose themselves to the dangers of taking
prey without the alternative of food provided by their mother. These young cats
called transients, wander far from the familiar home range of their mother and their hunting skill
are not as efficient as those of older resident cats. The dispersal of young transient cougars out of
their birth areas is crucial, however, as it reduces inbreeding and provides new blood to outlying
populations.(9)

**MATING**

Both male and female cougars are sexually mature at 24 months, but females have been known to
breed as early as 20 months;(9) a Florida panther was recently reported as having given birth
before she was 2 years old.(15) The age of the first breeding may be delayed until the female has
established a home range.(16)

When it comes time to mate, the first challenge facing a male and female cougar is finding each
other. Solitary and territorial by nature, cougars are frequently scattered over hundreds of miles of
rugged terrain. It further complicates the matter that females are receptive to males for only a few
days out of each month;(17) however, it appears to be the lions' territorial habits and keen senses
that ultimately allow them to come together.

Polygamy seems to be the rule for both male and female mountain lions. Males occupy larger
home ranges than females, and a resident male with a large home range typically overlaps or
encompasses the home ranges of several resident females. Nevertheless, in stable cougar
populations with established home ranges, females rarely mate with more than one resident male
during a breeding cycle.(9)
Resident male cougars use scrapes as visual and olfactory signals to other cougars and to mark their home range area. A scrape (or scratch) is a collection of pine needles, leaves, or dirt scraped into a pile with either the forepaw or hindpaws. Occasionally they urinate or defecate on the pile. Scrapes are made throughout the home range and are frequently located along travelways under a tree(18,19) or along ridges. Females rarely scrape, more commonly burying their feces under mounds of dirt and debris; these mounds are usually found near large kills.(19)

Mountain lion authority Fred Lindzey believes scrapes help mountain lions both avoid and locate each other. "Scrapes are definitely a means of communication. They broadcast the resident male's presence to other males (residents and transients) and to females. Females may use scrapes made by the resident male to both avoid him when she has dependent kittens and to find him when she is in estrus."(20)

Adult males probably spend most of their time searching for receptive females.(21) When mating does occur, it usually takes place in the female's home range, with the male seeking out the female.(6) The female's estrous cycle lasts approximately 23 days and she is usually in heat for about 8 days. The pair may stay together for up to 3 days, sometimes even sharing a kill.(19)

Cougars compensate for long periods of solitude with some of the most vigorous breeding behavior known to exist among mammals. Copulation can occur at a rate of 50 to 70 times in 24 hours for a 7- to 8-day period.(22) Each copulation lasts less than a minute.(2) Such enthusiastic copulation is thought to stimulate ovulation, (the release of eggs from the ovaries to make them available for fertilization). In his book The Natural History of Wild Cats, Andrew Kitchener explains the advantage of such behavior: "Most cats are thought to be induced ovulators, so that even though the female may come into estrus, no ovulation occurs unless the vagina and cervix of the female are stimulated repeatedly during mating. As a consequence of estrus lasting several days and ovulation being induced, the chance of a successful fertilization can be maximized."(23) Some biologists speculate that high copulation rates also evolved as a way for females to evaluate male vigor(1) and to ensure that their offspring receive the best genetic endowment.(24)

Cougars appear to be as vocal as they are enthusiastic during mating. The "caterwaul," characteristic in domestic cats, seems to be even louder in mating cougars. Such behavior has been documented both in captive and wild cougars.(9) Paul Bier has heard these sounds coming from mating cougars in his California study area;(12) biologist Susan de Treville, who studied mountain lions in California, was camping on the Malaspina Peninsula in British Columbia when he heard two cougars mating nearby. "Both were screaming loudly. They got to within a foot of my tent, then they gradually moved off. In the morning I found the ground torn up and all the grass flattened."(25)
After 88 to 96 days, the mother retires to the seclusion of the den and gives birth to a litter of 1 to 6 kittens (or cubs). The average litter size is 2 to 3 kittens, but a young female may produce only 1 kitten in her first litter. This seems to reduce the stress on first-time mothers, allowing them to develop their skills in rearing young. Since cougars tend to bear young every other year, a female that lives for 8 to 10 years has the potential to produce 5 litters. One captive cougar produced 7 litters in 16 years.(27) How many of the kittens survive to adulthood is still a mystery. It is also unknown if the number of offspring produced by a female cougar fluctuates in relation to the abundance of prey, as in other predators such as coyotes and barn owls. Few newly born litters have been studied closely in the wild and definitive information is lacking; however, current research underway in Yellowstone National Park and in the San Andres Mountains of New Mexico may provide some answers about the early lives of pumas.

If a female loses her kittens to predators or other circumstances, she may begin her estrous cycle and breed again soon after the loss.(28) Sometimes, predators include male cougars; studies in Idaho, Utah, and California have documented that males do indeed kill and even eat kittens on occasion. Whether this is an evolved behavior similar to African lions is unknown, but it may partly explain why females with kittens are unreceptive to males and intolerant of their presence until the young are independent and can hunt for themselves. Females also seem to possess the ability to suppress their estrous cycle during the period they are raising young. Some experts speculate that this ability is hormonal in nature and is possibly related to lactation; others suggest that estrous cycles continue normally and the female simply works harder at avoiding males by being careful where she urinates and by burying her feces. Whether this behavior is hormonal, behavioral, or both is unknown.

Unlike most wild animals, cougars can and do give birth throughout the year, although peaks have been documented in different parts of their range. One population in Idahopeaked in the spring,(16) while cougars in parts of Utah and Wyoming(29) had fall birth peaks. Nevada biologists documented birth peaks during June and July and noted 70 percent of all births occurred between April and September.(9) Mountain lions in and around Yellowstone National Park give birth primarily in midsummer.(30) Researcher Allen Anderson looked at the birth dates of 6 wild and 35 captive cougars and discovered that over half (55 percent) of the births occurred during April, June, July, and August.(1)

Biologists long speculated that in temperate climates, births occurring during the warmer months placed less stress on both the mother and kittens; however, as Harley Shaw points out, "Birth in warm months forces the mother to be feeding large young during mid to late winter. This does not reduce stress on her over the long haul."(31) It has also been suggested that in the warmer climates of Arizona, Florida, and California, births may be more evenly distributed throughout the year. Existing information from these states is inconclusive. Two more aspects of the American lion that have left experts scratching their heads.
DEATH

While all cougars enter the world in the same fashion, they leave it in a variety of ways. Existing information indicates that the three primary causes of cougar deaths are humans, natural causes, and accidents.

More mountain lions die at the hands of humans than any other known cause of death. This is as true today as it was in the past. A minimum of 65,665 cougars were shot, poisoned, trapped, and snared by bounty hunters, federal hunters, and sport hunters from 1907 to 1978 in the 12 western states, British Columbia, and Alberta. This carnage seemed to peak between 1930 and 1955, with the highest numbers of pumas killed in California, British Columbia, and Arizona. This sobering tally does not include the thousands of cougars slaughtered prior to the 1900s nor the untold numbers that have gone unreported since.

Today, cougar hunting is legal in Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington, Wyoming, and the Canadian provinces at British Columbia and Alberta. During the 1989-1990 sport harvest season more than 2,176 cats were killed. Most of these states allow hunters to kill only one lion per season with the notable exception of Texas, which has the most liberal hunting regulations and places no limits on the number of cats a hunter can take. The cougar enjoys full protection in 24 states and provinces, but has no legal classification and no protection, except in agreement with the Federal Government, in 22 other states and provinces.

Predator control programs present yet another obstacle to the cougar's survival. The U. S. Department of Agriculture's Animal Damage Control (ADC) program was responsible for killing 207 cougars in 11 western states during the 1988 fiscal year because of attacks on domestic livestock.

In addition to ADC's efforts, many states carry on their own predator control programs. For instance, in 1988, ADC killed 38 cougars in California, while the state Department of Fish and Game authorized other hunters to take an additional 28 cougars on depredation permits, for a total of 64 cats. This situation is further complicated by the fact that cougars are occasionally caught in traps set for other animals, and because there is no easy way to release them many are killed. The cats can sometimes pull themselves free of the traps, often at the cost of severed toes or broken bones. Cats that escape with minor injuries may still be capable of taking large prey and surviving, while those with debilitating injuries likely die of starvation.

Collisions with motor vehicles are the primary cause of death in Florida panthers. From 1979 to 1991, almost 50 percent of documented mortality of the Florida cats was due to collisions with
In California, 22 mountain lions fell victim to collisions between 1971 and 1976, while researcher Paul Beier lost five lions he was studying to cars. Three young cougars were even killed by a train, all in the same incident, in Colorado.

A number of the cats have drowned in irrigation canals, or by falling into wells. Cougars are capable swimmers, but the smooth concrete banks make escape difficult and the exhausted cats will eventually drown. Unfortunately, such incidents will increase as more cougar habitat is encroached upon by humans.

Even in the absence of humans, cougars practice a high-risk lifestyle; they are continuously exposed to injury or death because they prey on animals larger than they are. In Idaho, both male and female pumas kill male elk, an animal seven times the size of a female puma. While deer, more manageable in size, are the cougar's prey of choice, some do not submit without a struggle. During attacks on deer or elk cougars have been thrown against trees so hard that their backs have been broken or they sustained massive internal injuries. They have been trampled by the hooves of deer and elk they were attacking, and even impaled on branches or antlers. A debilitating injury like a broken bone can lead to starvation.

Other types of accidents include falls from cliffs, being struck by lightning, being hit by rock slides, being poisoned by venomous snakes, and choking. Susan de Treville tells of a mountain lion that died from a violent encounter with a manzanita bush. "We were monitoring an old lion (9-10 years) named Snaggletooth, because he had a broken upper canine. One day we found him lying in an open field-dead. We had no idea what killed him. Later an examination revealed a 5-inch piece of manzanita in the cat's throat. Apparently, during the final rush at what we think was a deer, the cat ran into a manzanita bush at high speed driving a stab down its throat and severing the carotid artery. Failing eyesight may have been part of the reason Snaggletooth bled to death internally."

There are three times during their lives when cougars are most at risk: immediately after birth, immediately after becoming independent transients, and during old age. Kittens left alone at a den or kill are vulnerable to other predators, including, as has been noted, adult male cougars; it is unknown how many kittens survive to maturity, but experts suspect that kitten deaths could equal or exceed the number of cougars killed by sport hunting. Transient cougars spend most of their time in unfamiliar territory and have not honed their hunting skills, so do not hunt as efficiently as resident cougars. Old cougars experience extreme tooth wear and loss in weight, making them less efficient hunters, resulting in starvation. Old age is probably the most significant cause of death in unhunted mountain lion populations; a recent study in southern Utah showed that the annual mortality rate in an unhunted cougar population was a fairly high 26 percent. In Montana's hunted cougar populations, over 50 percent of the resident adults in one area were killed, according to research conducted there.
Adult cougars do kill and even eat one another on occasion. Fighting has been documented in Arizona, California, Nevada, Texas, Wyoming, and Utah. In one study in the San Andres Mountains of southern New Mexico, fighting was found to be the primary cause of death. While in Florida, fighting has led to the death of six endangered panthers over the past 11 years. Of these, two were transient males dispersing from their mother’s home range through home ranges of resident males courting females in heat; two were adult females killed by a young adult male; and the last two were the result of fighting between adult males. Experts speculate that most conflicts are over females and home ranges, but it is still unknown precisely how much fighting contributes to overall mortality in a cougar population.

Cougars appear to suffer from relatively few internal and external parasites. Those they do contend with include an assortment of fleas, ticks, mites, and tapeworms. The puma’s solitary lifestyle and its habit of spending little time in dens probably minimizes infestation.

Deaths attributable to more serious diseases appear to be uncommon. Only two cases of rabies have been documented in wild mountain lions, one in California in 1909, and a more recent case in Florida. Naturally occurring antibodies to feline distemper were found in 85 percent of the Florida panthers tested. Another mountain lion in California was recently diagnosed with feline leukemia and was killed. California Department of Fish and Game veterinarian Thierry Work thinks the cat may have been infected by eating domestic cats. The feline leukemia virus is frequently fatal and no vaccine for wild cougars exists; this disease especially threatens small, isolated populations of cougars that front on urban areas, such as in southern Florida and southern California. Allen Anderson cautions that the widely held opinion that wild pumas are largely free of parasites and diseases may be due to the lack of specific research rather than reality. Cougar diseases are just one of many aspects of the cat that need further study.

CHAPTER NOTES

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• Murphy, K. 1983. Characteristics of a hunted population of mountain lions in western Montana. (Relationships between a mountain lion population and hunting pressure in western Montana.)Report to the Montana Department of Fish, Wildlife and Parks.
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SECTION 401, TITLE 14, CCR

§401. Issuance of Permit to Take Animals Causing Damage.
(a) Application. A person who is a property owner or tenant may apply to the department for a permit to take elk, bear, beaver, bobcat, mountain lion, wild pigs, deer, wild turkeys, or gray squirrels that are damaging or destroying, or immediately threatening to damage or destroy, land or property. A bobcat or mountain lion in the act of injuring or killing livestock may be taken immediately provided the property owner or tenant applies for a permit from the department the next working day following the take.
(b) Permit Period.
(1) Permits issued pursuant to this section for beaver, wild pigs, or gray squirrels shall be valid for a period not to exceed one year.
(2) Permits issued pursuant to this section for bobcat, elk, bear, wild turkey, or deer shall be valid for a period not to exceed 60 consecutive days.
(3) Permits issued pursuant to this section authorizing the use of dogs for bear or bobcat shall authorize no more than three dogs and shall be valid for a period not to exceed 20 consecutive days.
(4) Permits may be renewed if damage or threatened damage to land or property continues to exist.
(c) Required Information and Conditions of Permit.
(1) The department shall collect the following information before issuing a depredation permit:
(A) The name, mailing address, and contact information of the property owner, including telephone, facsimile, and email. If the owner is a business entity, contact information for the person acting on behalf of the business.
(B) The name, mailing address, and contact information of the tenant (if applicable), including telephone, facsimile, and email.
(C) The name, mailing address, and contact information of any dog handlers or agents as described in subdivision (e), including telephone, facsimile, and email.
(D) The county and address of the location of the damage caused by depredation, or the nearest landmark or cross streets.
(E) A full description of the land or property damaged, destroyed, or immediately threatened, and the date the damage or threat occurred.
(F) The species suspected of damaging, destroying, or threatening land or property, and the method of identifying the species.
(G) A description of all non-lethal or less-lethal measures undertaken to prevent damage caused by animals prior to requesting the permit.
(H) A description of corrective actions that will be implemented to prevent future occurrence of the damage.
(I) The proposed method of take.
(J) Whether dogs will be used to pursue or take the animal, and if so, why dogs are needed, and the number of dogs to be used.
(2) The department may add terms and conditions to the permit necessary to protect wildlife and ensure public safety. To be valid, the permit shall contain a statement signed by the applicant that he/she has read, understands, and agrees to be bound by all the terms of the permit.
(d) Methods of Take.
(1) Animals taken pursuant to a permit may be taken in any legal manner except as herein provided and in accordance with the provisions of Section 465.5 of these regulations. Permits to take deer shall include conditions that comply with Fish and Game Code section 4181.5. Permits to take bear, bobcat and mountain lions with dogs shall include conditions that comply with Fish and Game Code Section 3960.2. No steel-jawed leghold traps may be used to take mammals, and no iron-jawed or any type of metal-jawed traps may be used to take squirrels, bobcats, bears, or mountain lions. No poison may be used. The department may specify the caliber and type of firearm and ammunition, archery equipment or crossbow to be used. The department may require that a permittee take animals alive by the use of live traps.
(2) The permittee and/or agent shall ensure that all animals are killed in a humane manner instantly and prevent any injured animal from escaping.
(e) Government Employees and Designated Agents.
(1) An employee of a federal, State, or local government agency or local district with responsibilities including but not limited to animal control, animal damage control, irrigation, flood, or natural resource reclamation, while acting in his/her official capacity may take depredating animals on the property designated in a permit issued pursuant to this section.
(2) The permittee may designate up to three other persons, including any dog handler who will be utilized in any pursuit, as his/her agents to take animals under the terms of the permit. A designated agent shall be any person who is acting under the direction and control of the permittee and who is 21 years of age or older. The designated agent(s) shall be named on the permit. The permittee may substitute designated agents with prior written approval of the department.
(f) Persons Prohibited from Taking Animals. No person shall take animals pursuant to the permit if he/she has been convicted of a violation related to the take or possession of game or furbearing mammals in the past 24 months or if he/she is on probation and may not hunt or possess a firearm as part of the terms of probation. A landowner who is on probation and may not hunt or possess a firearm as part of the terms of probation shall designate a qualified agent to take animals under a permit.
(g) Reports Required.
(1) Holders of permits authorizing take of wild pigs shall provide a report listing the date and sex of each wild pig taken. A report shall be submitted whether or not any animals were taken. The reporting period shall be by calendar month. The permittee or designated agent shall complete and submit the report to the department on or before the 15th day of the following month. Reports shall be submitted to the address provided by the department.
(2) Holders of permits authorizing the use of dogs to take bear, bobcat or mountain lions shall comply with the requirements of Fish & Game Code section 3960.2 and shall submit a report to the department within 30 days of permit issuance. Reports shall be submitted to the address provided by the department. Reports shall include the following information:
(A) Date of kill and the sex of any bear, bobcat or mountain lion that was killed.
(B) Details regarding all pursuits, including any information about a pursued bear, bobcat or mountain lion, even if the animal was not killed.

(C) An explanation of why any pursued bear, bobcat or mountain lion was not killed, and whether such bear, bobcat or mountain lion was harmed.

(h) Tagging Animals. All animals taken pursuant to a permit, except wild pigs, shall be immediately tagged with tags provided by the department. Wild pigs shall be tagged prior to being transported from the property designated in the permit. Tags for animals except wild pigs shall be completed at the time the animal is taken. Tags for wild pigs shall be completed before the wild pigs are removed from the property. Tags shall clearly show the permittee’s name, address, date and location the animal was taken and shall include the signature of the person taking the animal. The report portion of each tag shall be mailed to the department without delay. No tags are required for squirrels or beavers.

(i) Utilization of Carcass. Animals taken pursuant to this permit must be disposed of as required in the permit. No animals, except wild pigs, may be utilized by the permittee or designated agent. The permittee or designated agent may leave the carcass of any wild pig where it was taken for reasons of high air temperatures, disease, parasites, or conditions which preclude use of the carcass. A person who makes every reasonable attempt to utilize the carcass of any wild pig as required in this subsection shall be deemed to be in compliance with Section 4304 of the Fish and Game Code.

(j) Suspension and Revocation of Permits.

(1) Permits may be suspended temporarily by the director for a breach or violation of the permit by the holders thereof, their agents, servants, employees or any person acting under their direction and control. The commission shall be notified of any such suspension and subsequently may revoke or reinstate the permit, or fix the period of its suspension, after written notice to the permittee and the permittee has been afforded an opportunity to be heard.

(2) Any person who has had his/her permit revoked or suspended by the commission shall be required, upon application for a new or subsequent permit, to appear before the commission and demonstrate to its satisfaction that the use of such a permit will be consistent with depredation control, with these regulations, and with the laws under which they are promulgated.

(k) It is unlawful for a permittee or agent to violate any of the terms or conditions of a permit issued pursuant to this section.

(l) The permit does not invalidate any city, county, or state firearm regulation.

Note: Authority cited: Sections 200, 202, 1050, 3960.2, 4150, 4181, and 4181.5, Fish and Game Code. Reference: Sections 3003.1, 3960, 3960.2, 4150, 4152, 4181, and 4181.5, Fish and Game Code.

FISH AND GAME CODE 4803. Upon receipt of a report pursuant to Section 4802, the department, or any animal damage control officer specifically authorized by the department to carry out this responsibility, shall immediately take the action necessary to confirm that there has been depredation by a mountain lion as reported. The confirmation process shall be completed as quickly as possible, but in no event more than 48 hours after receiving the report. If satisfied that there has been depredation by a mountain lion as reported, the department shall promptly issue a permit to take the depredating mountain lion.
4807. (a) Any mountain lion that is encountered while in the act of pursuing, inflicting injury to, or killing livestock, or domestic animals, may be taken immediately by the owner of the property or the owner's employee or agent. The taking shall be reported within 72 hours to the department.