

**June 2010 – AMENDMENT \*\*\* DRAFT**

**HH. Jaguar (*Panthera onca*).**

1. The Department and its Designated Agents are authorized to intentionally take jaguars by the Emergency Provisions set forth at §17.21(c)(3) (see term and condition S.1.c, above) and, contingent upon the following terms and conditions, by this Permit in conjunction with Section 6 of the Act and §17.21(c)(5) (see term and condition S.1.a, above):
  - a. USFWS approval of a project description within the scope of the Department's Section 6 Cooperative Agreement that provides: (i) the specific jaguar conservation purpose(s) to be achieved through capture, release, and post-release monitoring and any other study approaches included in the project description, including identification of the data to be derived from each aspect of the study and specific and/or overall conservation benefits to be gained by application of that information; (e.g. identification of habitats used or potentially valuable as movement corridors or landscape linkages) to be gained by application of that information; and (ii) a detailed description of relevant biological and logistical considerations for the proposed project, including but not limited to: methods of capture; environmental and logistical conditions under which capture would and would not be attempted; procedures for monitoring open capture-sets; pre- and post-release handling and treatment procedures; information on drugs and drug dosages to be used on any captured jaguar; monitoring of pre- and post-release animal recovery from capture and handling; veterinary support pre- and post-release; intra- and inter-agency coordination procedures for capture efforts, pre-release handling, release, and post-release monitoring; and an assessment of the potential benefits of capture-release-monitoring (e.g. radio and/or GPS-collared tracking) and other methods of studying free-ranging jaguars (e.g. remote trail cameras, hair-snares, scat studies) versus any risk of harm to the jaguar from alternative methods of capture-release-monitoring (said risk assessment should include a full evaluation of all information available on captures and attempted captures of jaguars in Mexico [Sonora and/or Chihuahua] and the United States [Arizona] since 2000).
  - b. If such project description is developed, prior to submittal for approval by USFWS the Department shall have the draft document(s) reviewed by the AZ-NM Jaguar Conservation Team (JAGCT; including its Scientific Advisory Group), the independent Jaguar Species Survival Plan, and (as appropriate) other wildlife and veterinary professionals. USFWS may, as appropriate, elect to coordinate further peer-review of the project description by appropriate wildlife and veterinary professionals to better inform its approval decision. If such project description is approved by USFWS, the Department and USFWS shall incorporate the project into the Department's Section 6 Work Plan as necessary to authorize all aspects of planned intentional capture and study of jaguar.
2. The Department and its Designated Agents are authorized to collect genetic or biological samples from jaguars through use of noninvasive techniques, such as use of hair snares (Note: collection of scat from free-ranging jaguars is not prohibited under the Act and does not require federal authorization; however, use of scat to take, including but not limited to "harass", a jaguar does require federal authorization, as is addressed in term and condition HH.3, below). In the event of a jaguar being handled pursuant to §17.21(c)(3)(see term and condition S.1.c,

above), or as a result of unintentional capture or authorized intentional capture, the Department and its Designated Agents are authorized to collect urine, scat, hair, oral and rectal swabs, and other noninvasive samples that may be useful in furthering recovery of the species.

3. The Department and its Designated Agents are authorized to use jaguar-derived scents, lures, or baits (i.e., substances containing hormones, pheromones, scat, urine, or other parts from or products of a jaguar) as attractants on or near hair snares and remote (trail) cameras to detect presence of a jaguar, including efforts to confirm a reported sighting of a jaguar. The following term and condition applies: to minimize the potential for unintentional capture of a jaguar, these scents, lures, or baits shall be used consistent with term and condition HH.4.b, below.
4. The Department and its Designated Agents, during the normal course of their duties, may unintentionally capture a jaguar. If unintended capture occurs, the Department and its Designated Agents are authorized, for the well-being of the jaguar, to use chemical and physical restraints, remove the animal from the capture device, and release the animal on-site as soon as it is deemed safe for the animal. The following terms and conditions apply to the Department's efforts to minimize the likelihood and the impact of unintended capture in an area defined to include all confirmed occurrences of the species since 1971, referenced herein known as the Area of Capture Concern (AOCC):
  - a. The AOCC is the portion of Arizona that is south of I-10 from the Arizona/New Mexico border to its junction with I-8 and east of the eastern boundary of the Tohono O'odham Indian Reservation and (at its northerly end) BIA Roadway 15 north to I-8 (Attachment A.).
  - b. The Department and its Designated Agents shall not use jaguar-derived scents, lures, or baits (i.e. substances containing hormones, pheromones, scat, urine, or other parts from or products of a jaguar) as attractants in conjunction with any method of wildlife capture (i.e. any capture device) employed anywhere in Arizona unless prior approval is secured from USFWS pursuant to term and condition HH.1.b, above.
  - c. Within 24 hrs of Department confirmation of a jaguar occurrence within Arizona or Department acceptance of an occurrence confirmed by another entity, the Department shall report the occurrence to the appropriate Department Phoenix and Regional staff, the USFWS Arizona ESO Field Supervisor, the USDA-APHIS Wildlife Services State Director, the appropriate BLM District Manager, and the appropriate USFS Forest Supervisor.
  - d. Within the AOCC, when the Department or its Designated Agents are using traps, snares, or other capture devices that are of sufficient size to capture a jaguar: (i) the sets shall be placed, shaded and monitored as necessary to provide reasonable protection against hypo and hyperthermia of a captured jaguar; (ii) at least one person who is monitoring the capture device must be Department-certified in the handling procedures referenced in term and condition HH.5, below.
  - e. Snares set by the Department or its Designated Agents within the AOCC for lions, bears, or wolves shall be set to minimize the likelihood of catching a jaguar and to minimize the risk of entanglement if a jaguar is captured unintentionally.
  - f. Within 120 days of this Permit being issued, the Department shall submit to USFWS for approval a revised handling protocol to further reduce the risk of harm to a jaguar that is captured unintentionally. The revised protocol shall, at a minimum, address: (i) the methods and means of restraint, sedation, estimating age, weight, reproductive status, and

overall physical condition; (ii) methods and means of taking biological samples for off-site analysis (e.g. hair, blood, and swab samples); (iii) procedures for post-sedation recovery, release, and post-release monitoring for sufficient time to ascertain whether the animal has fully recovered from handling prior to release; and (iv) guidelines for emplacing a radio telemetry, satellite tracking, or GPS collar. Prior to submitting the protocol to USFWS for approval, the Department shall solicit review by the AZ-NM Jaguar Conservation Team (JAGCT; including its Scientific Advisory Group) and the independent Jaguar Species Survival Plan (and other wildlife and veterinary professionals, as appropriate). USFWS may, as appropriate, elect to coordinate further peer-review of the revised protocol by appropriate wildlife and veterinary professionals to better inform its approval decision. If a revised protocol is approved by USFWS, the new protocol will supersede any existing handling protocol incorporated by reference into this Permit (see term and condition HH.5.d, below).

5. The Department and its Designated Agents are authorized to immobilize and release at the site of capture any jaguar that is captured pursuant to §17.21(c)(5) or the State's Section 6 Cooperative Agreement, §17.21(c)(3), or under this Permit. The following terms and conditions apply to AGFD's efforts to minimize the effects that immobilization and release might have on a captured jaguar:
  - a. Once all public safety and all immediate safety and health needs for the animal have been addressed, the Department or Designated Agent in charge at the capture site shall attempt to notify, the Department's 24-hr Radio Room.
  - b. The Department shall notify the FWS Arizona ESO Field Supervisor within 24 hours of the capture and release of a jaguar.
  - c. The Department employee or Designated Agent in charge at the capture site shall proceed with handling and releasing the jaguar in accordance with applicable handling procedures as described below.
  - d. Unless superseded by a later version, as stipulated at term and condition HH.4.f, above, the approved handling protocols for any captured jaguar shall be those approved in 2007 by the AZ-NM Jaguar Conservation Team (JAGCT).
  - e. If a captured jaguar is sedated for release from a restraining device, while it is under sedation data may be recorded on estimated age, sex, reproductive status, and weight, unless collecting such information would put the health and well being of the animal at risk. A discrete ear tag may be affixed. A radio telemetry, satellite tracking, or GPS collar may also be placed on the sedated animal but the collar shall not exceed 5% of the animal's estimated body weight. The decision to place a collar shall be based on the health and age of the animal. Photographs of all sides of the animal (including forehead, tail, left side, right side, and spine area) shall, if possible, be taken to aid in future field identification based on color and pelt patterning.
  - f. The Department shall maintain a list of veterinarians qualified to provide field support (or at least telephonic support) in the event a jaguar is captured. The Department or its Designated Agents shall contact one of the listed veterinarians, if veterinary support proves necessary and time and logistics allow such support to be used. Given the limited number of veterinarians in Arizona with jaguar experience, the list should also include veterinarians who have experience treating (handling) African lions, tigers, or (less preferably) mountain lions or black or brown bears. The list of consulting veterinarians shall be updated at least

annually and a copy shall be available through the Department's 24-hr Radio Room. A copy of the list shall be carried in the field by Department personnel or Designated Agents who do not have access to the 24-hr Radio Room if they are using traps, snares, or other implements in the AOCC that are of sufficient size to capture a jaguar.

- g. Release of a captured jaguar may be delayed only if one or both of the following conditions exist: (i) delay is necessary to provide veterinary care for life-threatening or significantly debilitating injuries or disease that are noted during pre-release assessment of the animal's condition; and (ii) prevailing environmental conditions make delayed release a lower threat to survival of the jaguar than would be posed by immediate release on site.

Note: Terms and conditions HH.5.a-g, above are intended to minimize the effects of immobilization and release and should, to the maximum extent practicable, be applied to any jaguar capture and release activities conducted pursuant to term and condition S.1.c above (i.e. Emergency Provisions set forth at §17.21(c)(3)).

- 6. In accordance with §17.21(c)(3) and the Department's Section 6 Cooperative Agreement, the Department and its Designated Agents are authorized to hold and transport individual jaguars that require prolonged veterinary assistance related to apparent health issues. Treatment of such animals shall be provided or supervised by licensed veterinarians or certified veterinary staff unless exigent circumstances require a wildlife professional to provide treatment to restrain or stabilize the animal while seeking veterinary care or support.
- 7. The Department and its Designated Agents are authorize to take jaguars as follows:
  - a. Unlimited take, in the form of harass, resulting from activities authorized in this permit or approved in the Departments Section 6 annual work plan is authorized in §17.21(c)(5) through the Department's Section 6 Cooperative Agreement; this includes noninvasive sampling techniques (as discussed in terms and conditions HH.2 and HH.3 of this Permit), surveys, and monitoring.
  - b. Incidental take, in the form of mortality and harm (injury), is authorized under this Permit not to exceed one jaguar: (i) through an unintended capture, immobilization, and release; or (ii) through a planned capture pursuant to term and condition HH.1, above.
- 8. Take of jaguar consistent with §17.21(c)(5) (see term and condition S.1.a, above) or pursuant to the Emergency Provisions in §17.21(c)(3) and the Department's Section 6 Cooperative Agreement is in addition to take that is authorized by this Permit.