

Mexican Wolf Blue Range Reintroduction Project Adaptive Management Oversight Committee Standard Operating Procedure

Title: Helicopter Capture and Aerial Gunning

Number: 15.0

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Purpose: This SOP describes the procedures by which IFT personnel conduct helicopter operations for capture or lethal control of Mexican wolves, and provides guidelines for contract crews to conduct capture operations. It supersedes relevant sections of the 1998 Mexican Wolf Interagency Management Plan (USFWS 1998), and therefore represents, in part, the “Service Approved Management Plan” referenced in the Mexican Wolf Final Rule (50 CFR 17.84(k)).

Note: As noted in SOP 1.0, Reintroduction Project SOPs are developed with cooperation from the White Mountain Apache Tribe and the San Carlos Apache Tribe for the benefit of the overall Project. However, on tribal lands any Project activities are governed by tribal authorities, laws, rules, policies, etc. and Statements of Relationship between each tribe and the U.S. Fish and Wildlife Service. Thus, IFT helicopter capture and/or aerial gunning activities may only be conducted on Tribal lands with prior approval by the appropriate Tribal authorities.

Exceptions: None. Per SOP 2.0, AMOC must approve any exceptions to this SOP.

Background: Mexican wolves are occasionally captured with the aid of a helicopter using net-guns and darting. At times this may be the most efficient and cost effective method to capture wolves in a short amount of time. The use of a helicopter may also be used for lethal control of wolves. It is imperative to ensure the safety of the personnel involved in the capture and the animals being captured during one of these operations.

Any IFT members involved in helicopter operations must follow their agency regulations with respect to aviation safety requirements, personal protective equipment, training, certification, and approval, including approval of aircraft and pilots.

Procedures:

1. Coordination.
 - a. A written plan of action for the proposed capture will be established prior to any helicopter operation (see example in Appendix A), detailing:
 - i. The proposed handling procedure for the wolves to be captured.
 - ii. The procedures that will be performed on the wolf (radio collar, draw blood, weight, measurements, etc.).
 - iii. All personnel involved (helicopter and spotter plane pilots, net-gunner, darter, ground crew, etc.) and their respective responsibilities for the capture.
 - iv. An Incident Commander (IC), designated by the IFT or the agency responsible for

the capture, for each helicopter operation. The IC is responsible for the entire operation (see below).

- v. Emergency contact information.
 - vi. If there is intent to land in recognized (legally declared) wilderness, prior approval from the appropriate land management agency must be secured.
- b. Communication must be established prior to the capture.
 - i. Air to air (helicopter to spotter plane). Verify frequency and do a radio check.
 - ii. Air to ground (helicopter and spotter plane to ground crew). Verify frequency and do a radio check.
 - iii. Make certain the pilot can communicate with the ground crew.
 - c. The Incident Commander (IC) will review the capture strategy with all personnel involved in the operation to ensure that everyone is clear on what needs to be accomplished with the capture and what the expectations are. The IC makes the final call on “Go” or “No Go.”
 - d. The IC is the only point of contact to coordinate with the pilot, the gunner, and the ground crew, in order to limit confusion and maintain organization during the operation.
 - e. All personnel handling wolves must be experienced with all handling procedures and familiar with necessary emergency procedures (according to SOP 3.0).
 - f. The appropriate State and/or Tribal wildlife agencies and local law enforcement shall be contacted prior to use of a helicopter within a specific area, to ensure that no conflicting or potentially hazardous activities are being conducted within that area.
 - g. All landowners in the area of the operation shall be contacted prior to the capture to obtain permission to access or land a helicopter on their property if necessary.
 - h. The appropriate State or Tribal Interagency Field Team Leader will provide a schedule of routine flights to the Southwest Coordination Center (SWCC)(505) 842-3473. AGFD will provide contact frequencies to SWCC as well. If routine flights are rescheduled due to weather or other considerations the pilot, observer, or AGFD 24 hr dispatch will notify SWCC of the changes. SWCC will notify the appropriate USFS Forest Zone dispatch of pending aircraft activity. The purpose of this coordination is to mitigate potential airspace conflicts with other known agency aircraft operating in the same area. Pilots are also responsible for checking NOTAMs for any Temporary Flight Restrictions (TFR) or other airspace issues.
 - i. When mission-specific flights (e.g. capture and darting) are planned, the appropriate State or Tribal Interagency Field Team Leader, observer, and/or pilot will contact SWCC to advise them of the event.
 - j. Whenever possible, flights over wilderness/primitive areas will be at least 2000 feet above ground level.

2. Capture.

- a. A net-gun (Barrett 1982) may be used to capture wolves from a helicopter, using methods similar to those of Gese (1987) in suitable habitat.
- b. IFT members may serve as net-gunners only if they are trained and have approval from their respective agency.
- c. If the helicopter pilot will allow an IFT member to work with the crew, the IFT will have someone in the helicopter to work as an animal handler. This person must be familiar with all procedures necessary to handle the wolf and must be proficient with different handling techniques.
- d. A veterinary pack will be carried in the helicopter with all the necessary processing equipment for handling the wolf and emergency veterinary procedures.
- e. A wolf may not be actively chased for more than 10 consecutive minutes for live capture, without allowing it to rest or recover.
- f. Radio communication must be confirmed prior to the chase.
- g. If IFT personnel are not allowed on the helicopter, a spotter plane will be used for the IC to make the “Go” or “No Go” call.
- h. If the spotter makes the call to back off the chase, the helicopter will pull back and stop pursuit until the wolf has been given adequate time to recover before continuing.
- i. After the wolf is captured, it should be stabilized and processed on site.
- j. If IFT personnel are not allowed on the helicopter during the capture:
 - i. An IFT ground crew will be staged in an area within 10 minutes of where the capture occurs to process the wolf. This area must have a suitable landing site for the helicopter.
 - ii. The helicopter crew must physically restrain and stabilize the wolf before transporting it to the ground crew. The wolf should not be immobilized at this point, unless the helicopter crew cannot physically restrain the wolf.
 - iii. The wolf’s body temperature must be taken! Cooling agents (ice water, ice packs, rubbing alcohol) will be on board the helicopter.
 - iv. The muzzle should be removed and the wolf should be allowed to breath freely.
 - v. If the animal is hot, cool it down with water or ice packs. Rubbing alcohol may also be poured on the ears, paw pads, and leg pits.
- k. A veri-kennel should be in the helicopter for transporting the wolf from the capture site to the ground crew. If a veri-kennel will not fit in the helicopter, a box muzzle will be used to protect helicopter personnel and allow the wolf to breath freely.

1. Upon transport to the ground crew, IFT personnel will continue to stabilize the animal and will not process the animal until it is stabilized.
3. Processing of the wolf will follow SOP 21.0.
4. Darting from a helicopter (see Ballard 1981).
 - a. No one will dart a wolf from a helicopter without proper training.
 - b. All IFT members must be approved in advance by their respective agencies in order to dart wolves from a helicopter.
 - c. Darting will follow the same procedures as outlined in the helicopter net gun process (with the exception of Step 2.j.ii), and the processing event will follow the criteria established in SOP 21.0.
5. Aerial gunning and lethal control.
 - a. Only personnel trained and certified by their respective agency shall perform aerial gunning and lethal control.
 - b. All appropriate coordination must take place as outlined above for each aerial gunning and lethal control operation.
6. For instructions concerning proposed wolf captures in wilderness (see Appendix B).

Approvals:

The Mexican Wolf Blue Range Reintroduction Project Adaptive Management Oversight Committee approved this SOP on October 10, 2005.

References:

- Ballard, B.W., A.W. Franzman, and C.L. Gardner. 1982. Comparison and assessment of drugs used to immobilize Alaskan gray wolves and wolverines from a helicopter. *Journal of Wildlife Diseases* 18:339-342.
- Barrett, M.W., J.W. Nolan, and L.D. Roy. 1982. Evaluation of a hand-held net-gun to capture large mammals. *Wildlife Society Bulletin* 10:108-114.
- Gese, E.M., O.J. Rongstad, and W.R. Mytton. 1987. Manual and net-gun capture of coyotes from helicopters. *Wildlife Society Bulletin* 15:444-445.

Appendix A.

Example of Aerial Capture or Gunning Plan

Helicopter Capture Operation 11/9/01 – 11/11/01:

Objective: Capture wolf 578, 580, and other wolves that need collars replaced or wolves that are un-collared and we need to collar for monitoring purposes.

Procedure: We are contracting with “Helicopters by OZ, Inc.,” owned and operated by John Olsen. Using net gunning, they will capture wolves and transport them to an area where Project personnel will be staged for processing the animals. 578 will be captured, processed (new collar), and translocated to release area east of Fish Bench, five miles NW of Hannagan Meadow (33 41’ 33.24” N / 109 23’ 29.64” approx.). 580 will be captured, processed (new collar), translocated to the same general release area as 578. Other wolves will be captured, transported to project staff to process on the ground, and then released on site.

Personnel: Brian Kelly (193a) – USFWS Mexican Wolf Recovery Coordinator
Dan Stark (194) – Acting Field Coordinator
Nick Smith (198) – NM Wolf Biologist
Paul Overy (191) – AGFD Wolf Technician
Melissa Woolf (199) – TESH
Basil Coffmann (702) – AGFD pilot
Anna Cellar (195f) – USFWS tech.
John Olsen (280SP) – Helicopter pilot
OZ personnel – net gunner and animal handler
Additional Wolf Recovery Program Volunteers as needed

Timeline: 11/09/01
AM – Spotter plane (Basil C. and Anna C.) will leave Springerville at 0600, locate wolf 578, and contact Dan S. (IC) with coordinates. Spotter plane will monitor wolf 578 until helicopter arrives. Dan S. and Melissa W. will stage near wolf to process it after capture. Helicopter crew capture and transport wolf to ground crew. Fuel truck available if needed or will travel to staging area near Point of Pines on San Carlos Reservation (SC) and meet with Nick S. Spotter plane stage at Point of Pines if landing strip available (Safford or Globe if not) until helicopter ready to capture 580. Helicopter move to Point of Pines after capture of 578 complete. Dan and Melissa process, transport, and release 578.

PM – Helicopter capture of wolf 580 on SC. Spotter plane locate wolf, contact ground crew, and stand-by if needed. Helicopter capture wolf and transport to ground crew. Nick S. (IC) and Paul O. process wolf and translocate. When capture complete, spotter plane and helicopter crew to Springerville for 11/10/01 capture.

- If time does not permit capture of wolf 580, start with him Saturday morning.

11/10/01

Ground crew stage near Reservation L. to process wolf if captured. Fuel truck also. Spotter plane take off at 0700 to locate Bonito Creek pack and contact ground crew with location. Helicopter attempt to capture wolf 587 (orange collar with green tape, red ear tags, probably smaller of the two Bonito wolves – 50 lbs when released at about a year old). She is priority because collar not functioning. We will also attempt to capture 674 (orange collar, blue ear tags); have had problems with his collar as well.

- We may also use the helicopter to get visuals on packs and attempt to capture un-collared wolves if possible (i.e. 169 Francisco, Cienega)
- We will keep helicopter available through Sunday 11/11/01.
- If wolf 647 is in an area where we can use the helicopter we will consider capture of this wolf also and translocate him.

Miscellaneous:

Locations: Point of Pines – 33 22’2.03”N/109 45’ 3.17”W
 Reservation L. – 33 50’45.86”N/109 30’ 12.52”
 General release site – 33 41’ 33.24”N/109 23’ 29.64”

Directions: Release area – Hwy 191 S from Alpine, W on FS 576 just N of Hannagan Lodge, N on FS 24 about ¾ mile, turn E on FS RD that follows the NE side of Fish Creek to Fish Bench.

Helicopter: Model - Hues 500
 Color – Red with flames
 Tail number – 280SP

Phone: AGFD Dispatch – (602) 789-3201
 WMAT Dispatch – (928) 338-1023
 SCAT Dispatch – (928) 475-2326/2329
 Springerville Airport – (928) 333-5746
 Safford Airport – (928) 428-7670
 Mike Rotonda (USFS RAC) – XXX
 John Olsen – cell: XXX

<u>Radio Frequencies:</u>	<u>TX</u>	<u>PL Tone</u>	<u>RX</u>
MEXICAN WOLF	XXX	XXX	XXX
AZG&F STATE F1	XXX	XXX	XXX
AZG&F STATE F2	XXX	XXX	XXX
CAR TO CAR	XXX	XXX	XXX
PLANE TO PLANE	XXX	XXX	XXX

Appendix B.

Proposed Landings in Wilderness

For proposed helicopter landings, the proposing agency or AMOC must be able to show that the project is necessary to manage the area as wilderness, and that a helicopter is the "minimum tool" to accomplish the work. Minimum Requirements Decision Guide (MRDG) Worksheets must be completed for the proposal, and at least one non-motorized alternative must be considered. The MRDG may be found at www.wilderness.net.

Forest Service Policy:

The Regional Forester is responsible for approving transport and supply by aircraft, air drop, motor boat, or mechanical transport.

Use of motorized equipment or mechanical transport may be approved only to meet minimum needs for protection and administration of the area as wilderness, only as follows:

- a. A delivery or application problem necessary to meet wilderness objectives cannot be resolved within reason through the use of nonmotorized methods.

OR

- b. An essential activity is impossible to accomplish by nonmotorized means because of such factors as time or season limitations, safety, or other material restrictions.