**SYNOPSIS**

On July 29, 2015, U.S. Fish and Wildlife Service/Office of Law Enforcement Special Agent (SA) received a report from the Mexican Gray Wolf Recovery Program (MGWRP) regarding the discovery of an unidentified canine skull in the Gila National Forest, New Mexico. The skull appeared to belong to a Mexican gray wolf based on its size and shape. The skull was found in the same general area where another wolf had been killed earlier in the year. The skull was found specifically at the following coordinates: latitude 33 degrees 56' 58.84" N, longitude 108 degrees 54' 49.50" W. The skull was collected by MGWRP personnel. On August 3, 2015, SA obtained custody of the unidentified canine skull, to which it was later submitted to the National Fish and Wildlife Forensics Laboratory for identification.
REPORT OF INVESTIGATION

Title: UNKNOWN CANINE SKULL – 07/29/2015

DETAILS OF INVESTIGATION

Information Received Regarding Discovery of Canine Skull

On July 29, 2015, the U.S. Fish and Wildlife Service/Office of Law Enforcement (USFWS/OLE) received a report from the Mexican Gray Wolf Recovery Program (MGWRP) regarding the discovery of a canine skull within the Gila National Forest, Catron County, New Mexico. The canine skull was similar in shape and size to that of a Mexican gray wolf’s skull. Specifically, the skull was found at the following coordinates: latitude 33° 56’58.84” N, longitude 108° 54’49.50” W. This area is located near County Road 218 north of New Mexico State Highway 12, between Aragon, New Mexico, and Old Horse Springs, New Mexico. According to MGWRP Wildlife Biologist (WB) the skull was discovered as she was conducting a search of the area with telemetry equipment for Mexican gray wolf #1279. Mexican gray wolf #1279, an alpha female, has been missing since approximately February 2015. Another wolf from the same pack as Mexican gray wolf #1279 had been discovered dead in February 2015, near the vicinity where the aforementioned canine skull was located. [Agent’s Note: For more information regarding the death of Mexican Gray Wolf #1385, refer to INV #2015200932.]

On July 30, 2015, USFWS/OLE Special Agent contacted WB via telephone and began coordinating the transfer of the canine skull to USFWS/OLE for further investigation.

Transfer of Canine Skull

On August 3, 2015, SA traveled to Silver City, New Mexico, and met with MGWRP WB to obtain custody of the skull which had been discovered by WB. WB had transferred custody of the canine skull to WB in order to transport the skull to SA Upon obtaining custody of the unidentified canine skull, SA transported it back to the USFWS/OLE in Las Cruces, New Mexico, where it was secured within an evidence freezer.

SA Submits Unidentified Canine Skull for Identification

On August 11, 2015, SA sent the unidentified canine skull to the National Fish and Wildlife Forensics Laboratory (NFWFL) in Ashland, Oregon, in order to have the skull analyzed to determine if it belongs to a Mexican gray wolf or not. SA requested, if the skull is identified as being a Mexican gray wolf, that an attempt be made to identify the lineage and/or pack of the wolf. The skull was submitted via FedEx to the NFWFL (See attachment #1, FedEx
On August 13, 2015, SA received an e-mail message indicating that the skull had arrived at the NFWFL (See attachment #2, Evidence Received by Laboratory).

DESCRIPTION OF SUBJECTS

No subjects have been identified at this time.

PRIOR VIOLATIONS

None to document as no subjects have been identified in this report.

WITNESSES

Special Agent
U.S. Fish and Wildlife Service
Office of Law Enforcement
San Andres National Wildlife Refuge
5686 Santa Gertrudis Drive
Las Cruces, New Mexico 88012

Wildlife Biologist
U.S. Fish and Wildlife Service
Division of Ecological Services
Mexican Gray Wolf Recovery Program
P.O. Box 856
Alpine, Arizona 85920

LAWS VIOLATED

No violations of law have been identified at this time.

EVIDENCE

1. One (1) unidentified canine skull with lower jaw, assigned Seizure Tag #764454, is currently held at the NFWFL in Ashland, Oregon.
REPORT OF INVESTIGATION

Title: UNKNOWN CANINE SKULL – 07/29/2015

Audio Recordings/Video Recordings/Photographs Created by Law Enforcement:

No recordings or photographs were created by OLE at this time.

Evidence Seized and Maintained by Another Agency:

No evidence has been identified at this time.

ATTACHMENTS

2. Copy of Evidence Received by Laboratory list, dated 08/12/2015 (1 page).
After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.
## Evidence Received by Laboratory

**Laboratory Case #:** 15-0241

### Agencies

<table>
<thead>
<tr>
<th>Agency Name</th>
<th>Agency Case Number</th>
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<tr>
<td>USFWS/LE, Las Cruces</td>
<td>2015203919</td>
</tr>
<tr>
<td>5886 Santa Gertrudis Drive</td>
<td></td>
</tr>
<tr>
<td>Las Cruces, NM 88012</td>
<td></td>
</tr>
</tbody>
</table>

### Evidence Items:

| LAB-1 | "One (1) unidentified canine skull with lower jaw" [ST#764454; Item#1] |

8/12/2015
### SYNOPSIS

This report documents the current status of this investigation as pending forensic analysis of evidence which was submitted to the National Fish and Wildlife Forensics Laboratory (NFWFL) on August 11, 2015. To date, no new information has been received from the NFWFL pertaining to this investigation.
REPORT OF INVESTIGATION

Title: UNKNOWN CANINE SKULL – 07/29/2015

DETAILS OF INVESTIGATION

Awaiting Forensics Analysis

On August 11, 2015, U.S. Fish and Wildlife Service/Office of Law Enforcement (USFWS/OLE) Special Agent (SA) submitted one (1) unidentified canine skull to the National Fish and Wildlife Forensics Laboratory (NFWFL) in Ashland, Oregon. SA requested that the skull be analyzed to determine if it belonged to a Mexican gray wolf or not. The skull was discovered within the Gila National Forest in Catron County, New Mexico, near an area where another Mexican gray wolf had been discovered shot. Based on the location where the skull was discovered and the size of the skull, it was decided that the item should be submitted for analysis for species identification.

As of the date of this report, no new information has been received as to the status of the analysis of the aforementioned skull.

DESCRIPTION OF SUBJECTS

No new subjects have been identified at this time.

PRIOR VIOLATIONS

None to document as no new subjects have been identified in this report.

WITNESSES

Special Agent, U.S. Fish and Wildlife Service
Office of Law Enforcement
San Andres National Wildlife Refuge
5686 Santa Gertrudis Drive
Las Cruces, New Mexico 88012

LAWS VIOLATED

No new violations of law have been identified at this time.
REPORT OF INVESTIGATION

Title: UNKNOWN CANINE SKULL – 07/29/2015

EVIDENCE

No new evidence has been identified at this time.

Audio Recordings/Video Recordings/Photographs Created by Law Enforcement:

No recordings or photographs were created by OLE at this time.

Evidence Seized and Maintained by another Agency:

No new evidence has been seized and/or maintained by another agency.

ATTACHMENTS

There are no attachments to this report.
DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
OFFICE OF LAW ENFORCEMENT
REPORT OF INVESTIGATION
REPORT#: 2015203919R003
APPROVED - CASE CLOSED

Note: This document contains neither recommendations nor conclusions of the Office of Law Enforcement, U.S. Fish and Wildlife Service. It is the property of this office and is loaned to your agency. It, and its contents are not to be distributed outside of your agency.

CASE TITLE
UNKNOWN CANINE SKULL - 07/29/2015

REPORT DATE
04/29/2016

CASE NUMBER
2015203919

REPORTING OFFICER

CASE STATUS
PENDING

APPROVED BY
06/01/2016
05/09/2016
05/04/2016

SUBJECTS OF REPORT

SYNOPSIS
This report documents the receipt of all forensics reports from the National Fish and Wildlife Forensics Laboratory. According to the forensics reports, the canine skull which was submitted for analysis was determined to belong to a Mexican gray wolf. More specifically, the skull was determined to belong alpha female Mexican wolf gray #1279. Further investigation pending.

DISTRIBUTION
Internal List
REPORT OF INVESTIGATION

Title: UNKNOWN CANINE SKULL – 07/29/2015

DETAILS OF INVESTIGATION

SA\(\text{INV}\)\#2015203919 \(\text{Report}\#\ 003\) Receives Forensics Reports

On March 15, 2016, U.S. Fish and Wildlife Service/Office of Law Enforcement (USFWS/OLE) Special Agent (SA) \(\text{INV}\)\#2015203919 received a Genetics Examination Report from the National Fish and Wildlife Forensics Laboratory (NFWFL) in Ashland, Oregon. SA \(\text{INV}\)\#2015203919 had submitted an unidentified canine skull to the NFWFL in order to have a genetics examination completed to determine if the skull belonged to a Mexican gray wolf, specifically Mexican gray wolf #1279. The skull had been located by Mexican Gray Wolf Recovery Program (MGWRP) personnel who had searched an area in the Gila National Forest for a missing wolf. The Genetics Examination Report, completed by Forensic Scientist \(\text{INV}\)\#2015203919 documented that mitochondrial DNA collected from the skull was compared to the NFWFL canid database. This analysis confirmed that the mitochondrial DNA from the skull was identical to that of Mexican gray wolves (\textit{Canis lupus baileyi}). The report also documented a second genetics examination in which nuclear DNA from the skull was compared to the NFWFL canid database. From this examination, the “autosomal short tandem repeat (STR) genotype was then compared to the NFWFL Mexican wolf database,” to which it was determined that the skull STR genotype originated from female Mexican gray wolf #1279 (See attachment #1, Genetics Examination Report).

Background Information of Mexican Gray Wolf #1279

Alpha female Mexican gray wolf #1279 was part of the Willow Springs Pack, which had been in the north-central portion of the Gila National Forest. This female had been paired with alpha male Mexican gray wolf #1185. In May 2013, these two (2) wolves produced a litter which consisted of at least five (5) pups. The two (2) wolves again produced another litter of pups in 2014. During the January 2015 survey completed by MGWRP personnel, alpha female Mexican gray wolf #1279 was determined to be missing and remained as such until the discovery of what has now been identified as her skull.

DESCRIPTION OF SUBJECTS

No new subjects have been identified at this time.

PRIOR VIOLATIONS

None to document as no new subjects have been identified in this report.
REPORT OF INVESTIGATION
Title: UNKNOWN CANINE SKULL – 07/29/2015
INV #: 2015203919
Report #: 003

WITNESSES
Special Agent
U.S. Fish and Wildlife Service
Office of Law Enforcement
San Andres National Wildlife Refuge
5686 Santa Gertrudis Drive
Las Cruces, New Mexico 88012
Forensic Scientist
U.S. Fish and Wildlife Service
Office of Law Enforcement
National Fish and Wildlife Forensics Laboratory
1490 East Main Street
Ashland, Oregon 97520

LAWS VIOLATED
No new violations of law have been identified at this time.

EVIDENCE
No new evidence has been identified at this time.

Audio Recordings/Video Recordings/Photographs Created by Law Enforcement:
No recordings and/or photographs were created at this time.

Evidence Seized and Maintained by Another Agency:
No evidence has been seized and/or maintained by another agency.

ATTACHMENTS
United States Department of the Interior
FISH AND WILDLIFE SERVICE
Office of Law Enforcement
Clark R. Bavin
National Fish and Wildlife Forensics Laboratory
1490 East Main Street
Ashland, Oregon 97520

February 25, 2016

GENETICS EXAMINATION REPORT

Agency: USFWS/LE, Las Cruces
5686 Santa Gertrudis Drive
Las Cruces, NM 88012

Lab Case #: 15-0241
Examiner: [Redacted]
Agency Case #: 2015203919
Investigator: [Redacted]
Suspects: [Redacted]
Case Title: Unknown Canine Skull - 07/29/2015

EVIDENCE RECEIVED:

The following evidence was received in the Evidence Unit of the Laboratory on August 12, 2015, and was transferred to the undersigned examiner on September 08, 2015:

LAB-1: "One (1) unidentified canine skull with lower jaw" [ST#764454; Item#1]

EXAMINATIONS REQUESTED:

The submitting officer, Special Agent [Redacted], requested that the species origin of LAB-1 be determined. Additionally, Agent Roper requested analyses to determine if the evidence represented by LAB-1 originated from a known Mexican wolf, Studbook (SB) #1279, which has been previously analyzed by the USFWSFL for parentage analysis and species conformation.

EXAMINATIONS CONDUCTED:

Species Identification by Mitochondrial DNA
A segment of the mitochondrial DNA (mtDNA) control region of LAB-1 was amplified by PCR and subjected to DNA sequence analysis. The resulting sequence was compared to the National Fish and Wildlife Forensics Laboratory (NFWFL) canid database.

Species Identification by Nuclear DNA
The DNA of LAB-1 was characterized by short tandem repeat (STR) analysis at twenty-four autosomal nuclear loci designated as 109, 123, 172, 200, 204, 225, 250, 377, AHTK-253, CX140, Ant-121, INU 055, Ren 105, INU 005, Pez 11, FH4027, FH3965, FH2096, FH2914, FH3853, FH2001, FH2088, FH2137 and FH2010, and at seven loci located on the Y-chromosome designated as 34A, 34B, 41A, 41B, 35.4, 650 79.2I and 650 79.2II.
The resulting STR genotype and Y-chromosome haplotype was compared to the NFWFL canid database. Assignment tests were used to determine if the STR genotype of LAB-1 was most likely to occur in western North America gray wolf (Canis lupus) populations, eastern North America gray wolf populations, Mexican wolves (C. l. baileyi), domestic dogs (C. familiaris), gray wolf hybrids (C. lupus x C. familiaris) or coyote (C. latrans) populations. The autosomal STR genotype was then compared to the NFWFL Mexican wolf database, which includes the known siblings of SB#1279, its known ancestry and all the currently free-ranging live wild population of Mexican Wolves.

**EXAMINATION RESULTS:**

*Species Identification by Mitochondrial DNA*

The mtDNA sequence of LAB-1 is identical to Canis lupus baileyi; GenBank Accession #AF005313, and the same as, the previously analyzed sample of SB#1279 at 221/221 base pairs. This mtDNA haplotype is unique to Mexican wolves (C. l. baileyi).

*Species Identification by Nuclear DNA*

The autosomal STR genotype of LAB-1 is identical to the previously analyzed sample of SB#1279 at twenty-one autosomal loci, and was consistent with having originated from Mexican wolves (C. l. baileyi).

Using the NFWFL Mexican wolf STR database, the likelihood that another particular individual, chosen randomly from the same population, has the same STR genotype as the STR genotype obtained from LAB-1 is less than one in 4,761,904,762. The likelihood that an unknown sibling of SB#1279 has the same STR genotype as obtained from LAB-1 is less than one in 1,220.

No Y-STR haplotype was obtained for LAB-1 indicating that the evidence item originated from a female.

**CONCLUSIONS:**

It is the opinion of the undersigned examiner;

The STR genotype of LAB-1 originates from the female Mexican wolf, SB#1279.

**DISPOSITION OF EVIDENCE:**

The evidence item was transferred to the Evidence Unit pending return to the submitting agency.

Forensic Scientist

Attachment: 1

Page: 2 of 2
DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
OFFICE OF LAW ENFORCEMENT

REPORT OF INVESTIGATION
REPORT#: 2015203919R004
APPROVED - CASE CLOSED

Note: This document contains neither recommendations nor conclusions of the Office of Law Enforcement, U.S. Fish and Wildlife Service. It is the property of this office and is loaned to your agency. It, and its contents are not to be distributed outside of your agency.

CASE TITLE
UNKNOWN CANINE SKULL - 07/29/2015

REPORT DATE
07/21/2016

CASE NUMBER
2015203919

REPORT/NG OFFICER
(b)(6), (b)(7)(C)

INVESTIGATION
POSSIBLE IN
FUTURE

APPROVED BY
07/21/2016
(b)(6), (b)(7)(C)

07/27/2016
(b)(6), (b)(7)(C)

08/10/2016
(b)(6), (b)(7)(C)

CASE STATUS
NO
INVESTIGATION
POSSIBLE IN
FUTURE

SUBJECTS OF REPORT

SYNOPSIS

This report documents the receipt of all forensics reports from the National Fish and Wildlife Forensics Laboratory. According to the forensics reports, the skull belonging to Mexican gray wolf #1279 did not yield any evidence to determine a cause of death. Further examination of the skull did show that the lower jaw had signs of having been cut with a "hand saw."

This report also documents the return of all evidence associated with this investigation.

DISTRIBUTION

Internal List
(b)(6), (b)(7)(C)
REPORT OF INVESTIGATION
Title: UNKNOWN CANINE SKULL – 07/29/2015
INV #: 2015203919
Report #: 004

DETAILS OF INVESTIGATION

SA Receives Forensics Reports

On July 12, 2016, U.S. Fish and Wildlife Service/Office of Law Enforcement (USFWS/OLE) Special Agent (SA) received two (2) forensics reports from the National Fish and Wildlife Forensics Laboratory (NFWFL) in Ashland, Oregon. SA had submitted an unidentified canine skull to the NFWFL, which was later identified as belonging to Mexican gray wolf #1279, for a genetics examination (See attachment #1, Evidence Submittal Form and Examination Request). Based on this determination, SA requested that further analysis be completed on the skull in an attempt to determine a cause of death and/or identify other evidence that could assist with this investigation. The reports included a Veterinary Pathology Examination Final Report and a Criminalistics Examination Report. The Veterinary Pathology Examination Final Report, which was prepared by Veterinary Pathologist, noted that the cause of death for Mexican gray wolf #1279 could not be determined based on an examination of the skull. Veterinary Pathologist noted that “no metal density objects” were present during a radiographic examination of the skull. Veterinary Pathologist did note that the “hemimandibles appear to have been partially cut off.” (See attachment #2, Veterinary Pathology Examination Final Report).

SA Receives Digital Imagery Examination Report

On July 14, 2016, SA received a Multimedia Examination Report from the NFWFL in Ashland, Oregon. The Multimedia Examination Report, which was prepared by Forensic Specialist, included a one (1) page contact sheet set of the images obtained by the NFWFL during the examination of Mexican gray wolf #1279’s skull (See attachment #4, Multimedia Examination Report). Forensic Specialist also included a CD containing digital copies of the photographs.
REPORT OF INVESTIGATION
Title: UNKNOWN CANINE SKULL – 07/29/2015

INV #: 2015203919
Report #: 004

Evidence Returned to SA Roper

On July 21, 2016, SA Roper received the returned evidence from the NFWFL. The evidence included the skull of Mexican gray wolf #1279. The aforementioned evidence was returned to SA Roper via FedEx (See attachment #5, Chain of Custody Record).

DESCRIPTION OF SUBJECTS

No new subjects have been identified at this time.

PRIOR VIOLATIONS

None to document as no new subjects have been identified in this report.

WITNESSES

Special Agent, U.S. Fish and Wildlife Service
Office of Law Enforcement
San Andres National Wildlife Refuge
5686 Santa Gertrudis Drive
Las Cruces, New Mexico 88012

Forensic Specialist, Forensic Scientist, Veterinary Pathologist
U.S. Fish and Wildlife Service
Office of Law Enforcement
National Fish and Wildlife Forensics Laboratory
1490 East Main Street
Ashland, Oregon 97520

LAWS VIOLATED

No new violations of law have been identified at this time.
REPORT OF INVESTIGATION
Title: UNKNOWN CANINE SKULL – 07/29/2015
INV #: 2015203919
Report #: 004

EVIDENCE

No new evidence has been identified at this time.

Audio Recordings/Video Recordings/Photographs Created by Law Enforcement:

Photographs

1. One (1) NFWFL CD titled, “15-0241, Copy of Necropsy Images,” stored at the OLE in Las Cruces, New Mexico.

Evidence Seized and Maintained by Another Agency:

No evidence has been seized and/or maintained by another agency at this time.

ATTACHMENTS

1. Copy of Evidence Submittal Form and Examination Request (1 page).
2. Copy of Veterinary Pathology Examination Final Report, dated 06/22/2016 (2 pages).
3. Copy of Criminalistics Examination Report, dated 06/15/2016 (1 page).
4. Copy of Multimedia Examination Report, dated 07/05/2016 (2 pages).
5. Copy of Chain of Custody Record (1 page).
**EVIDENCE SUBMITTAL FORM AND EXAMINATION REQUEST**

**Agency Case #:**
2015203919

**Case Officer:** (Name & Badge #)

**Evidence Submitted by:** (Name & Badge #)

**Date:**
08/11/2015

**Agency Name, Address:**
U.S. Fish and Wildlife Service/OLE
San Andres National Wildlife Refuge
5686 Santa Gertrudis Drive
Las Cruces, New Mexico 88012

**Suspect Name(s):**
N/A

**Rec'd in Lab:** (Date/By)
8/12/15

**Logged In:** (Date/By)
8/12/15

**Logged Out:**

**Area:** Genetics

**Case Title:**
Unknown Canine Skull - 07/29/2015

**Submission Number:**
1

### Item # and Seizure Tag #

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<td>One (1) unidentified canine skull with lower jaw</td>
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<tr>
<td>ST #</td>
<td>764454</td>
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**Lab #:**

**Additional Items Listed on back?**
[ ] yes [✓] no

**For additional information, contact:**
[✓] Case Officer [ ] Submitting Officer

**Phone:**

**Return Evidence To:**
[✓] Agency Address listed above
[ ] Other: see special instructions

**Examination or Shipping Instructions:**

History: Skull was discovered in a location where another wolf had been shot and killed. The mate of that wolf has been missing since around the same time period.

Examination: Determine if skull belongs to a Mexican gray wolf. If so, attempt to identify lineage/pack through DNA.
VETERINARY PATHOLOGY EXAMINATION
FINAL REPORT

Lab Case #: 15-0241
Agency Case #: 2015203919
Pathologist: (b)(6), (b)(7)(C)
Case Title: Unknown Canine Skull - 07/29/2015

EVIDENCE RECEIVED
The following evidence was received in the Evidence Unit of the Laboratory on August 12, 2015, and was transferred to the undersigned examiner on June 01, 2016:

LAB-1: "One (1) unidentified canine skull with lower jaw" [ST#764454; Item#1]

HISTORY
This skull was determined to have come from a female Mexican wolf (see Genetics Examination Report of Straughan dated February 25, 2016).

EXAMINATIONS CONDUCTED
LAB-1: The remains were examined visually for gross pathological lesions. Photographs were taken to document any significant gross pathological findings.

LAB-1 was assigned to Forensic Scientist - Criminalistics, for analysis. (See report dated June 15, 2016)

Images from the pathology examination were generated on a CD and contact sheet by Forensic Specialist – Multimedia. (See report dated July 5, 2016)

CASE SUMMARY
Examination of the skull of this Mexican wolf did not reveal a definitive cause of death. Parts of the right jaw were sawed off (see Criminalistics Examination Report of Poplin dated June 15, 2016) prior to receipt at the Lab, likely to retrieve the canine teeth.

EVIDENCE DETAILS – LAB-1
Common name: Wolf, Mexican gray
Weight: n/a

Pathologist Initials: (b)(6), (b)(7)(C)
Scientific name: *Canis lupus baileyi*

**Carcass composition:** Defleshed skull and jaw bones

**Nutritional condition:** Indeterminate

**Post-mortem condition:** Poor

**Sex:** Female

**Lifestage:** Adult

**Necropsy Date:** 01 June 2016

**POST-MORTEM FINDINGS**

**RADIOGRAPIC EXAMINATION:** The item consists of a complete skull with 2 sections of incomplete lower jaw. No metal density objects are noted.

**EXTERNAL EXAMINATION:** Present is an intact calvarium and 2 mandibles with the rostral portions absent. The right hemimandible has been truncated just rostral to the 4th premolar and the left has been truncated just rostral to the 3rd premolar. The fractured ends of the hemimandibles appear to have been partially cut off.

There is an irregular 12 x 5 mm hole in the ventral aspect of the right auditory bulla. There is a slab fracture of the left upper canine tooth. The fractured off slab is present with loose hair in the bag. The teeth are moderately worn. The lower right 1st molar is fractured, exposing the pulp cavity.

**SUMMARY OF POST-MORTEM FINDINGS**

Removal of front portions of lower jaw

**CAUSE OF DEATH**

**UNDETERMINED**

**DISPOSITION OF EVIDENCE:**

All evidence item(s) were transferred to the Evidence Unit pending return to the submitting agency.

Pathologist Initials

Veterinary Pathologist
June 15, 2016

CRIMINALISTICS EXAMINATION REPORT

Agency: USFWS/LE, Las Cruces
5686 Santa Gertrudis Drive
Las Cruces, NM 88012

Lab Case #: 15-0241
Examiner: [b](b)(6), (b)(7)(C)
Agency Case #: 2015203919
Examiners [b](b)(6), (b)(7)(C)
Suspects: [b](b)(6), (b)(7)(C)
Case Title: Unknown Canine Skull - 07/29/2015

EVIDENCE RECEIVED:
The following evidence was transferred to the undersigned examiner on June 07, 2016:

LAB-1: "One (1) unidentified canine skull with lower jaw" [ST#764454; Item#1]

EXAMINATION REQUESTED:
Analyze the fractured/cut ends of the lower jaw for toolmarks.

EXAMINATION CONDUCTED:
The lower jaw portions of LAB-1 were examined for possible tool marks.

EXAMINATION RESULTS:
The lower jaw of LAB-1 consists of two pieces identified as the left and right sides of the jaw. The center portion of the jaw has been removed leaving cut/fractured ends on the left and right sides.

EXAMINATION CONCLUSIONS:
The left side of the jaw appears to have been broken away from the center portion. The fracture surface is irregular, and the bone is splintered. There is no evidence of tool marks.

The right side of the jaw has visible tool marks consistent with having been sawed away from the center portion with a hand saw. The tool marks are suitable for microscopic comparison should a suspect tool be submitted.

DISPOSITION OF EVIDENCE:
All evidence item(s) were transferred to the Evidence Unit pending return to the submitting agency.

Forensic Scientist
MULTIMEDIA EXAMINATION REPORT

Agency: USFWS/LE, Las Cruces
5686 Santa Gertrudis Drive
Las Cruces, NM 88012

Lab Case #: 15-0241
Examiner: [Name]
Agency Case #: 2015203919
Investigator: [Name]
Suspects: [Name]
Case Title: Unknown Canine Skull - 07/29/2015

EVIDENCE RECEIVED:
No evidence was received.

EXAMINATION CONDUCTED:
Archived images from an electronic folder were copied to CD-Rs. Contact sheets were generated.

EXAMINATION RESULTS:
Nine (9) digital necropsy images of LAB-1 archived to an electronic case file folder were copied to a blank CD-R. A one (1) page contact sheet set was generated as a PDF file and copied to the CD-R. The CD-R is attached to this report. A second copy of the CD-R was generated and will be retained in the case file record. Each Contact Sheet Set was printed for a total of two (2) printed sets. One Contact Sheet Set print is attached to this report and one will be retained in the case file record.

EXAMINATION CONCLUSIONS:
No conclusions were requested.

DISPOSITION OF EVIDENCE:
No evidence was received.
**DATE AND TIME OF SEIZURE:**
August 3, 2015

**REGION**
2

**EVIDENCE/PROPERTY SEIZED BY:**
SA (b)(6), (b)(7)(C)

**SOURCE OF EVIDENCE/PROPERTY (person and/or location):**
- [X] RECEIVED FROM:
  MGWRP Biologist (b)(6), (b)(7)(C)
- [ ] TAKEN FROM:
- [ ] FOUND AT:

**CASE TITLE AND REMARKS**
Unknown Canine Skull - 07/29/2015

**ITEM NO.**

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<th>ITEM NO.</th>
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**NOTHING ELSE FOLLOWS**

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**RELEASE DATE:** 8/11/2015

**DELIVERED VIA:**
- [ ] U.S. MAIL
- [X] IN PERSON
- [ ] OTHER: FedEx

**RECEIPT DATE:** 8/12/15

**RELEASE DATE:** 7/20/16

**DELIVERED VIA:**
- [ ] U.S. MAIL
- [ ] IN PERSON
- [X] OTHER: FedEx

**RECEIPT DATE:** 07/21/16

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**ADDITIONAL TRANSFERS ON REVERSE SIDE**

Attachment: 5

Page: 1 of 1
This report documents the disposition of all evidence/property associated with this investigation. All of the evidence/property was disposed of in accordance with the regulations of the U.S. Fish and Wildlife Service/Office of Law Enforcement (USFWS/OLE). Since the statute of limitations has run and there is a lack of physical evidence and investigative leads pertaining to the death of Mexican gray wolf #1279, USFWS/OLE Special Agent is recommending this investigation for closure.
REPORT OF INVESTIGATION
Title: UNKNOWN CANINE SKULL - 07/29/2015
INV#: 2015203919
Report: 2015203919R005

DETAILS OF INVESTIGATION

Disposition of Evidence/Property

On August 18, 2020, U.S. Fish and Wildlife Service/Office of Law Enforcement (USFWS/OLE) Special Agent disposed of all evidence/property associated with this investigation. All of the evidence/property was disposed of in accordance with the regulations of the USFWS/OLE. The following lists the disposition of the evidence/property associated with this investigation:

- August 18, 2020 – One (1) Mexican gray wolf skull, identified in the Mexican Gray Wolf Recovery Program studbook as #1279, was transferred to the University of New Mexico/Museum of Southwestern Biology in Albuquerque, New Mexico (See attachment #1, Transfer Order Surplus Personal Property).

Based on the lack of physical evidence and/or investigative leads pertaining to the death of Mexican gray wolf #1279, is recommending this investigation for closure as the statute of limitations for this violation have tolled. [Agent's Note: The location where the Mexican gray wolf skull was located was near the allotment leased to who was later convicted of having killed Mexican gray wolf #1385. admitted to having trapped two (2) wolves, beating them into submission with a shovel, and then releasing the wolves back into the wild (refer to INV #2016202706). It is suspected that Mexican gray wolf #1279 may have been one (1) of these wolves associated with this event, though no other evidence was ever collected to link the cases other than statements during a profer and the close proximity of this skull to the carcass of Mexican gray wolf #1385.]

DESCRIPTION OF SUBJECTS

PRIOR VIOLATIONS
REPORT OF INVESTIGATION
Title: UNKNOWN CANINE SKULL - 07/29/2015
INV#: 2015203919
Report: 2015203919R005

WITNESSES

REPORTING OFFICER
Special Agent
U.S. Fish and Wildlife Service
Office of Law Enforcement
Las Cruces, New Mexico Investigations Office
San Andres National Wildlife Refuge
5686 Santa Gertrudis Drive
Las Cruces, New Mexico 88012

LAWS VIOLATED

No new violations of law have been identified at this time.

EVIDENCE

All evidence/property previously identified in R001 and listed below was transferred to the University of New Mexico/Museum of Southwest Biology and disposed of in accordance with USFWS/OLE regulations on 08/18/2020:

1. One (1) male Mexican gray wolf carcass, identified as studbook #1279 – ST #764454

Audio Recordings/Video Recordings/Photographs Created by Law Enforcement:

No recordings and/or photographs were created at this time.

Evidence Seized and Maintained by Another Agency:

No evidence has been seized and/or maintained by another agency at this time.

ATTACHMENTS

1. Copy of Transfer Order Surplus Personal Property, dated 08/18/2020 (1 page).
TRANSFER ORDER
SURPLUS PERSONAL PROPERTY

1. ORDER NUMBER(S)
   a. INV#2015203919
   b. 
   c. 

2. TYPE OF ORDER
   [ ] STATE AGENCY [ ] DOD/SEA [ ] FAA

3. SURPLUS RELEASE DATE

4. SET ASIDE DATE

5. NON-REPORTABLE
   [ ] REPORTABLE

6. TOTAL ACQUISITION COST
   N/A

7. TO
   GENERAL SERVICES ADMINISTRATION*
   Office of Law Enforcement

8. LOCATION OF PROPERTY
   USFWS/OLE
   5686 Santa Gertrudis Drive
   Las Cruces, New Mexico

9. HOLDING AGENCY (Name and address)*
   USFWS/OLE
   5686 Santa Gertrudis Drive
   Las Cruces, New Mexico 88012

10. FOR GSA USE ONLY
    SOURCE CODE
    [ ] STATE [ ] CITY
    TYPE OF DONATION
    ADJUSTED ALLOCATION CODE

11. PICKUP OR SHIPPING INSTRUCTIONS*
    Delivered via GOV. Purpose: Donated for educational and/or scientific purposes in accordance with Title 50, Code of Federal Regulations, Part 12, Section 12.35.

12. SURPLUS PROPERTY LIST

<table>
<thead>
<tr>
<th>L/A NO.</th>
<th>IDENTIFICATION NUMBER(S)</th>
<th>DESCRIPTION</th>
<th>DEMIL. CODE</th>
<th>COND. CODE</th>
<th>QUANTITY AND UNIT</th>
<th>ACQUISITION COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>ST#764454</td>
<td>One (1) Mexican gray wolf skull identified as belonging to #1279</td>
<td>N/A</td>
<td>N/A</td>
<td>1</td>
<td>N/A</td>
</tr>
</tbody>
</table>

13. TRANSFEREE ACTION
   a. TRANSFEREE (Name and address of State Agency, SEA, or public airport)*
   Museum of Southwest Biology
   Department of Biology
   University of New Mexico
   Albuquerque, New Mexico

14. ADMINISTRATIVE ACTION
   a. DETERMINING OFFICER (DOD or FAA)*
   b. GSA APPROVING OFFICER

*Please include "ZIP codes" in all address blocks.

STANDARD FORM 123 (Rev. 6-82)
Prescribed by GSA FPMR (41 CFR) 101-44.110
Attachment: 1
Page: 1 of 1