

Use of Technology and Science to Address Human–Wildlife Conflicts



Arizona Game and Fish Department
Rod Lucas, Regional Supervisor, Mesa



TRAINING HR DEPARTMENT

Human-Wildlife Interaction

Welcome to the Human-Wildlife Interaction System provided by the Arizona Game and Fish Department. This system is used to store and to retrieve data regarding wildlife conflict calls, wildlife handling, wildlife terminations, Big Game salvage permits, and wildlife vehicle collision reports. The data are for Department use only, and may not be distributed, copied, or shared with anyone without the proper permission from the Department. To access the system, please enter your AZGFD employee identification number (EIN), then press the "Enter" key or click the Login button.

Login...
E I N:

[Forgot Your EIN?](#) [Request Access?](#)



TRAINING HR DEPARTMENT DIRECTORY

HUMAN-WILDLIFE INTERACTION

Logout

HUMAN-WILDLIFE CALL

- Add New Call
- Search Calls
- Call Summary Reports

WILDLIFE HANDLING

- S.P.A.R.K.
- MAINTENANCE
- NEED HELP?
- 30-Day Records

- Bear 5/3/2011
- Bear 5/5/2011
- Bear 5/13/2011
- Bear 5/15/2011
- Bear 5/17/2011
- Bear 5/18/2011

Last Search Results

- Javelina 6/1/2011
- Bobcat 5/31/2011
- Bear 5/31/2011
- Bear 5/28/2011
- Lion 5/27/2011
- Coyote 5/26/2011

Photos

*click to upload photos

No Photo!

CALL FORM AGFD REFERRAL PUBLIC INTERVIEW MOUNTAIN LION

Record: 6910 Of 15497 | [Link to wildlife handling](#) | [E-Mail](#) | [Printable version](#) | [View Map](#) | [PREV](#) [NEXT](#)

Call Details

Staff Handling Call: **ELMORE STORBECK** Call ID: 2011-0527194009

Date of Call: 5/27/2011 Call Time (24-Hr): 1931

Incident Date: 5/21/2011 Ongoing/Multiple Interactions Unknown Inc. Time (24-Hr): 0100

Species Reported: Lion, Mountain Urban? Relocated?

Species Verified by AGFD: "Select species" Attack/Bite? Euthanized?

Data Entry: ELMORE STORBECK Category: "Select category"

Description (interaction, advice, action, etc.)
Number people involved: 1 / Witnesses: DAVID IS THE ONLY PERSON THAT SEEN IT. DAVID'S ADDRESS 13433 N13TH ST. / Phones: THE RP WILL HAVE DAVID'S NUMBER / Lion Desc: MOUNTAIN LION / Size: BIG CAT / Color: TAN / Behavior: ML KILLED DAVIDS DOG AND THEN WAS SITTING ON THE BLOCK WALL WHEN DAVID CAME OUT. ML PICKED UP DOG AND LEFT AREA /

Reporting Party

Name First: JAMES Last: MCCUTHEN

Affiliation/Involvement: Other:

City: Phoenix State: AZ Zip:

Phones Home: (602) 866-8611 Work: Ext. Mobile:

Email: OK to Contact?

Directions Comments

Interaction Location [copy](#) Click to copy RP address

Neighborhood/Business name or location: DAVID'S BACKYARD

Nearest Cross Streets:

Address: 13433 N 13TH ST City: Phoenix State: AZ Zip:

County: Maricopa Region: 6 GMU: 47M

Lat: 33.609299 Long: -112.052685

UTM_N: UTM_E: Datum: WGS84 Other:

Department Response

Service Provided (select as many as apply):

- Aversive Conditioning
- Collected Animal
- Dead Animal Report
- Emergency - Refer to 911 or Radio Room
- HOA - give talk, article, education information
- Left Message
- Loaned Equipment
- Mail Brochure
- Mail Brochure & Video

add + del -

Other Services: RP Reaction:

Aversive Conditioning Used & Response: Type: Response:

Show Involved Party

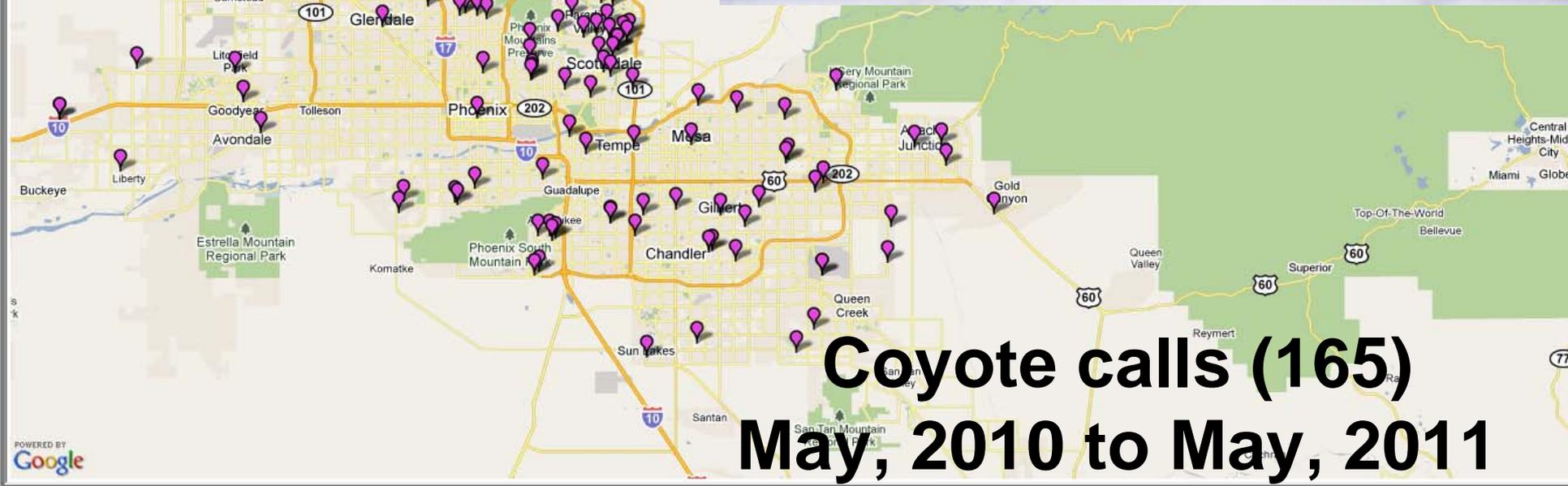
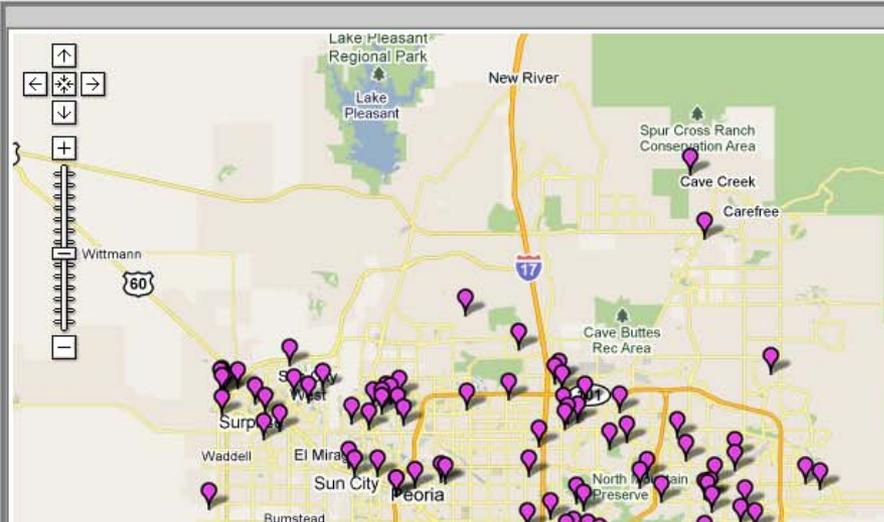
[Save](#) [Delete](#) [E-Mail](#)

http://myazgfd/hwinteraction/searchcalls.asp

Google

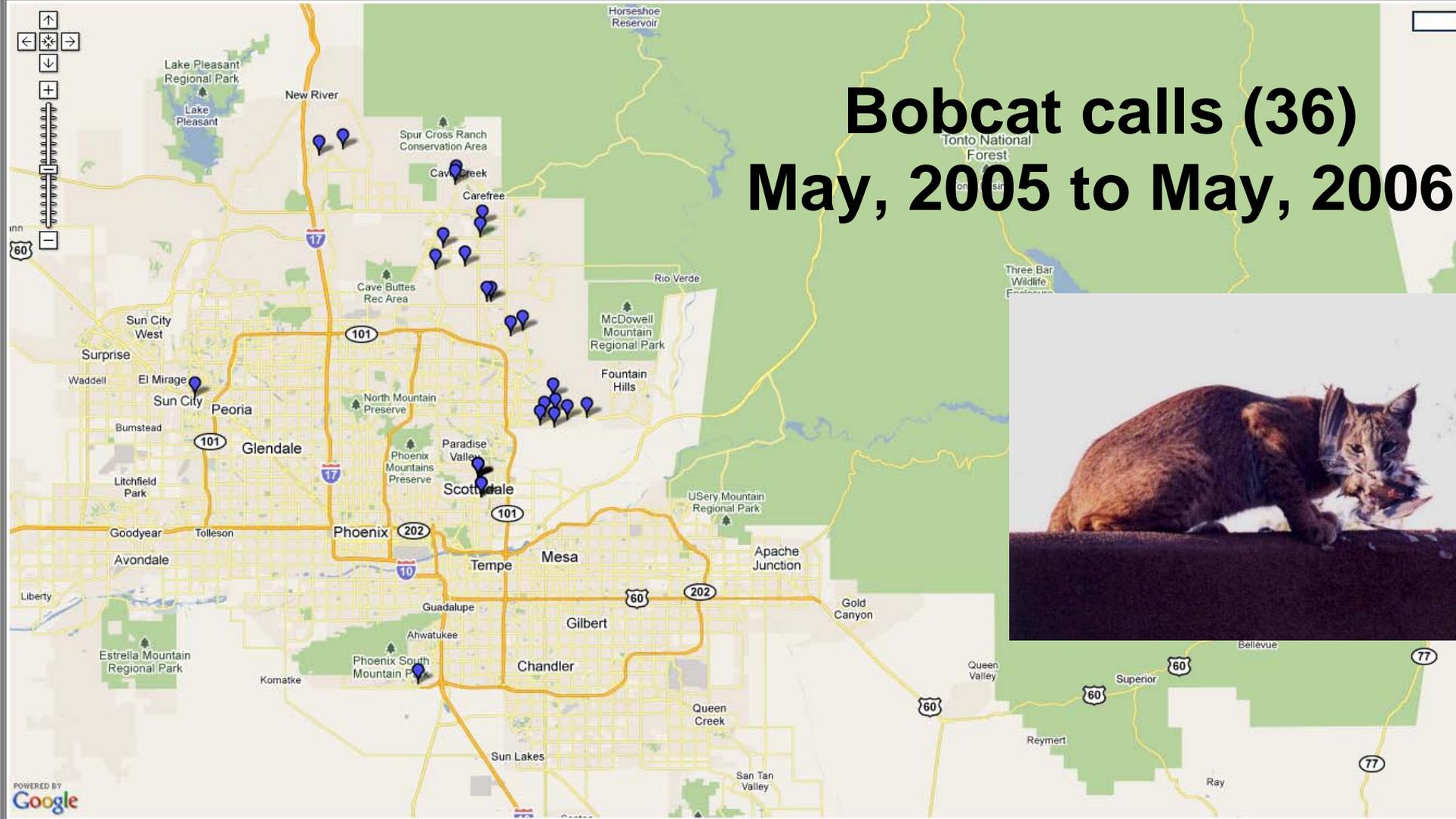
Favorites Suggested Sites Web Slice Gallery Free Hotmail

Human Wildlife Interaction

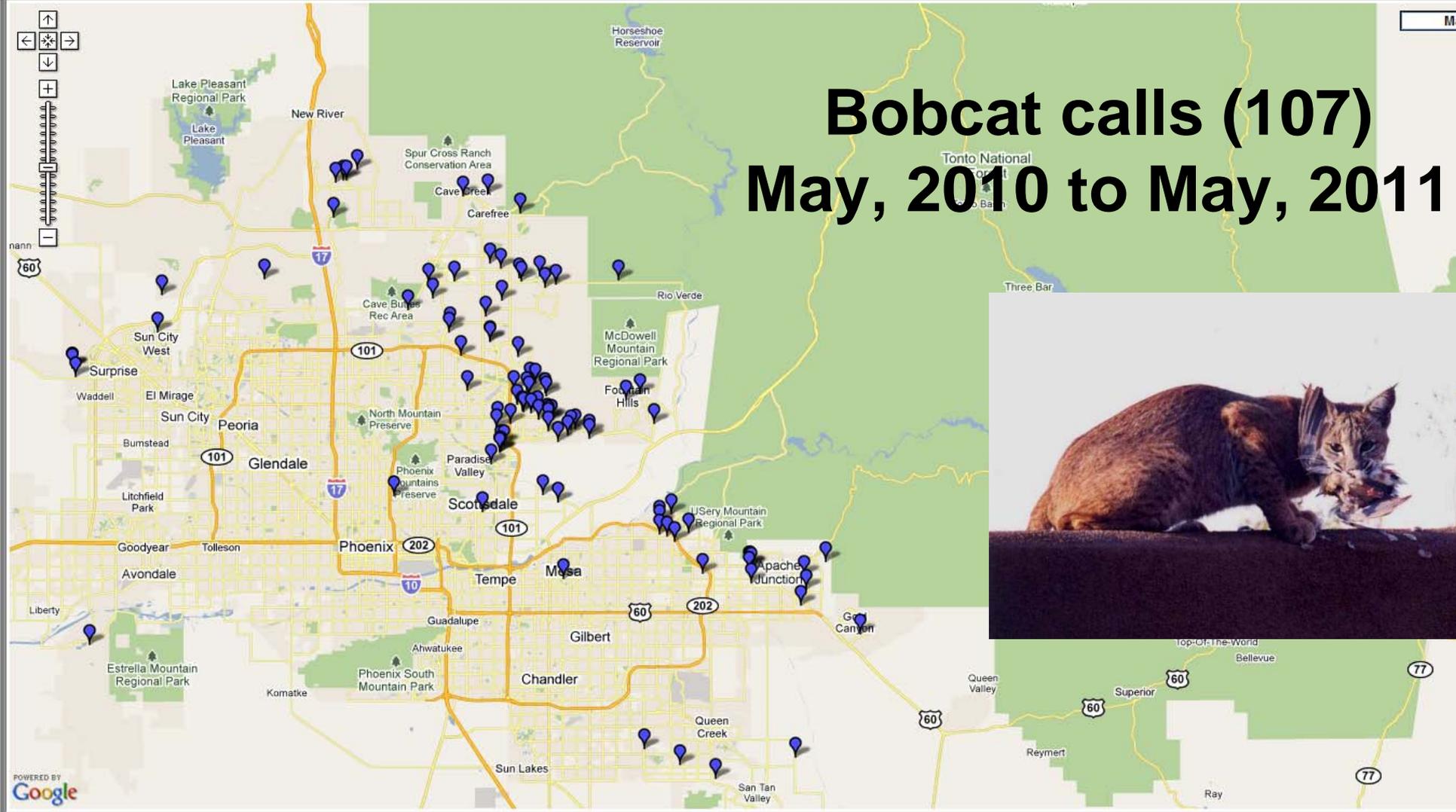


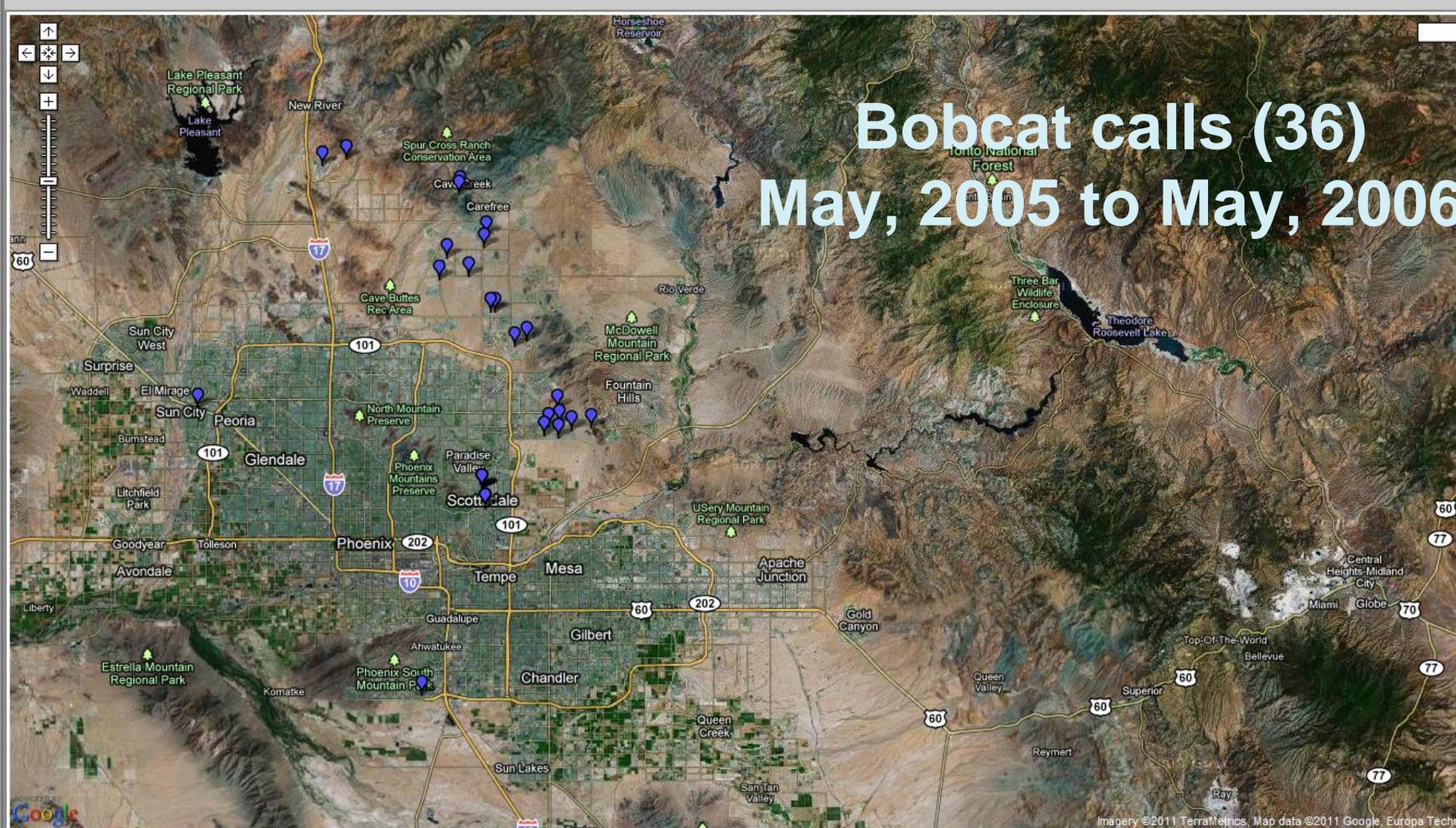
Coyote calls (165)
May, 2010 to May, 2011

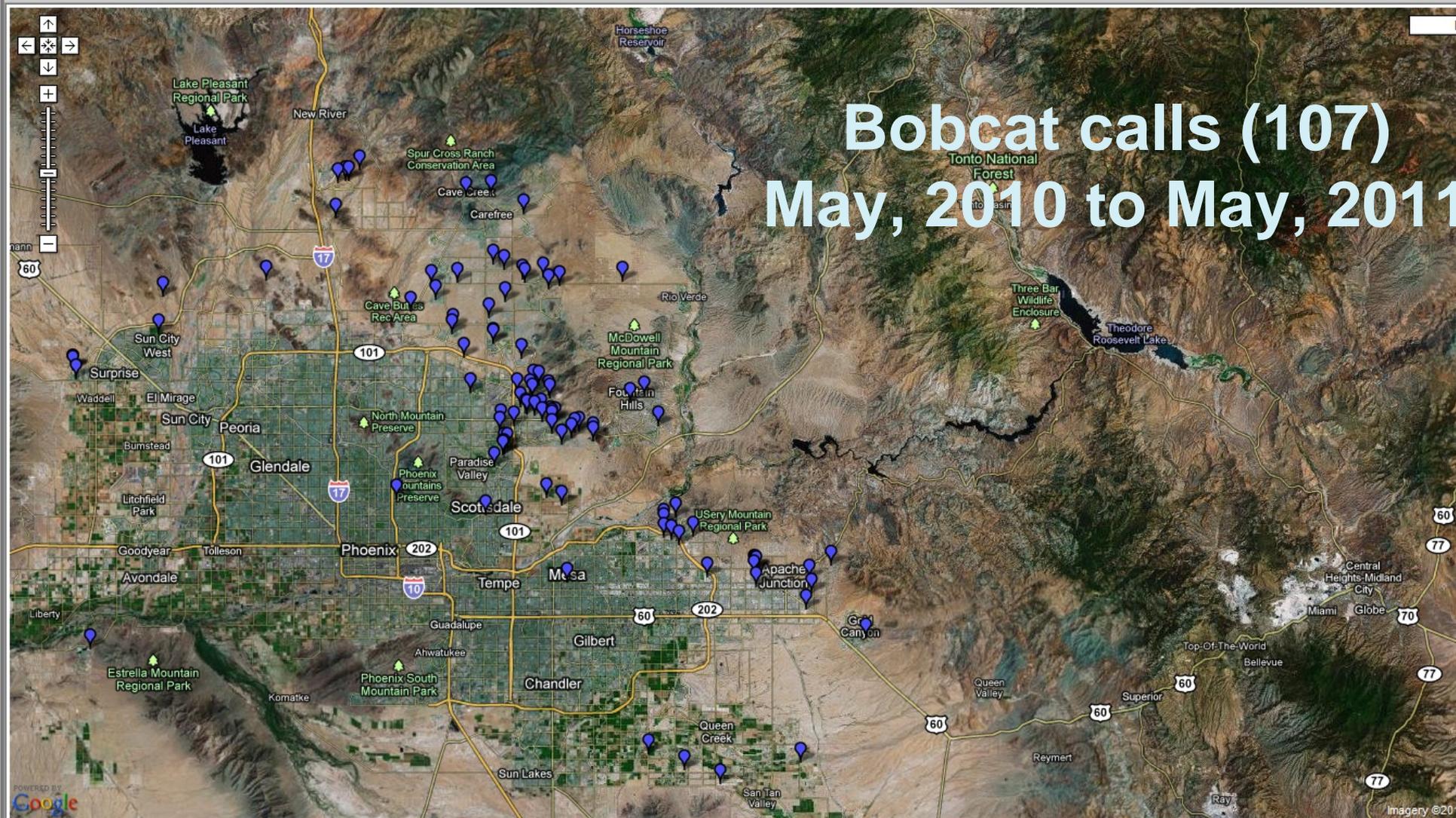
Bobcat calls (36) May, 2005 to May, 2006



Bobcat calls (107) May, 2010 to May, 2011

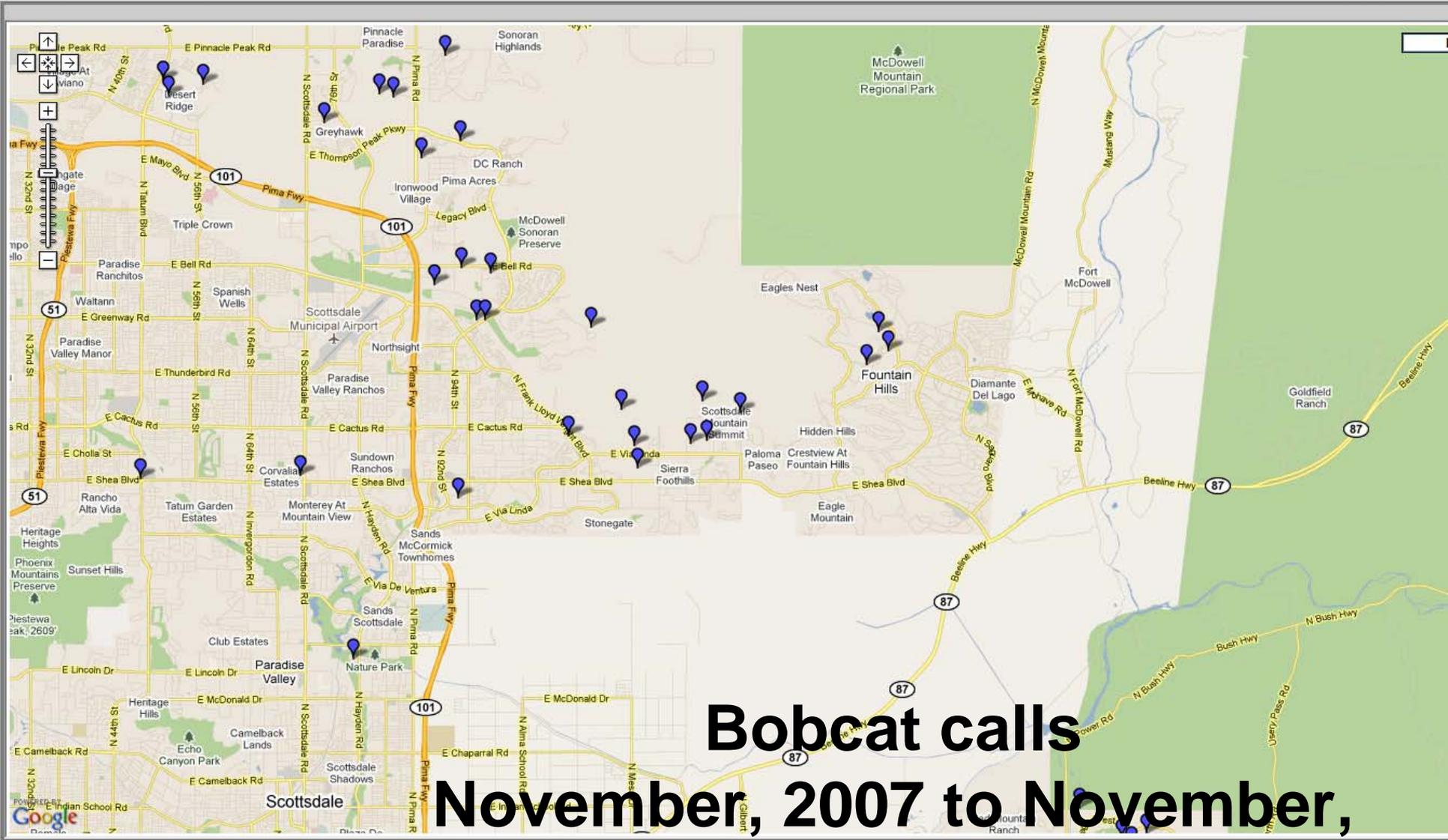








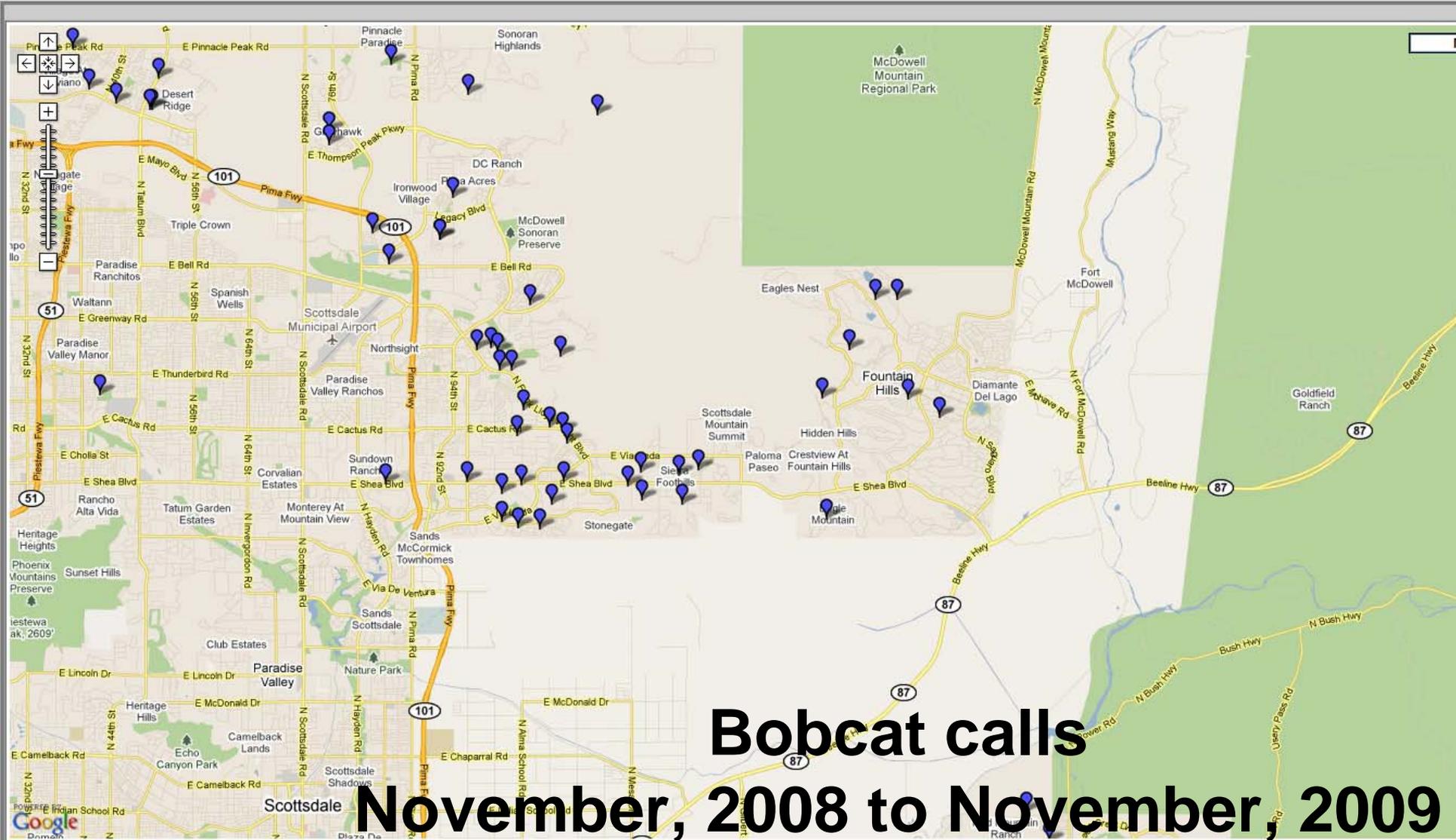
**Coyote calls
November, 2007 to November,
2008**



**Bobcat calls
November, 2007 to November,
2008**



**Coyote calls
November, 2008 to November,
2009**



Bobcat calls
November, 2008 to November, 2009

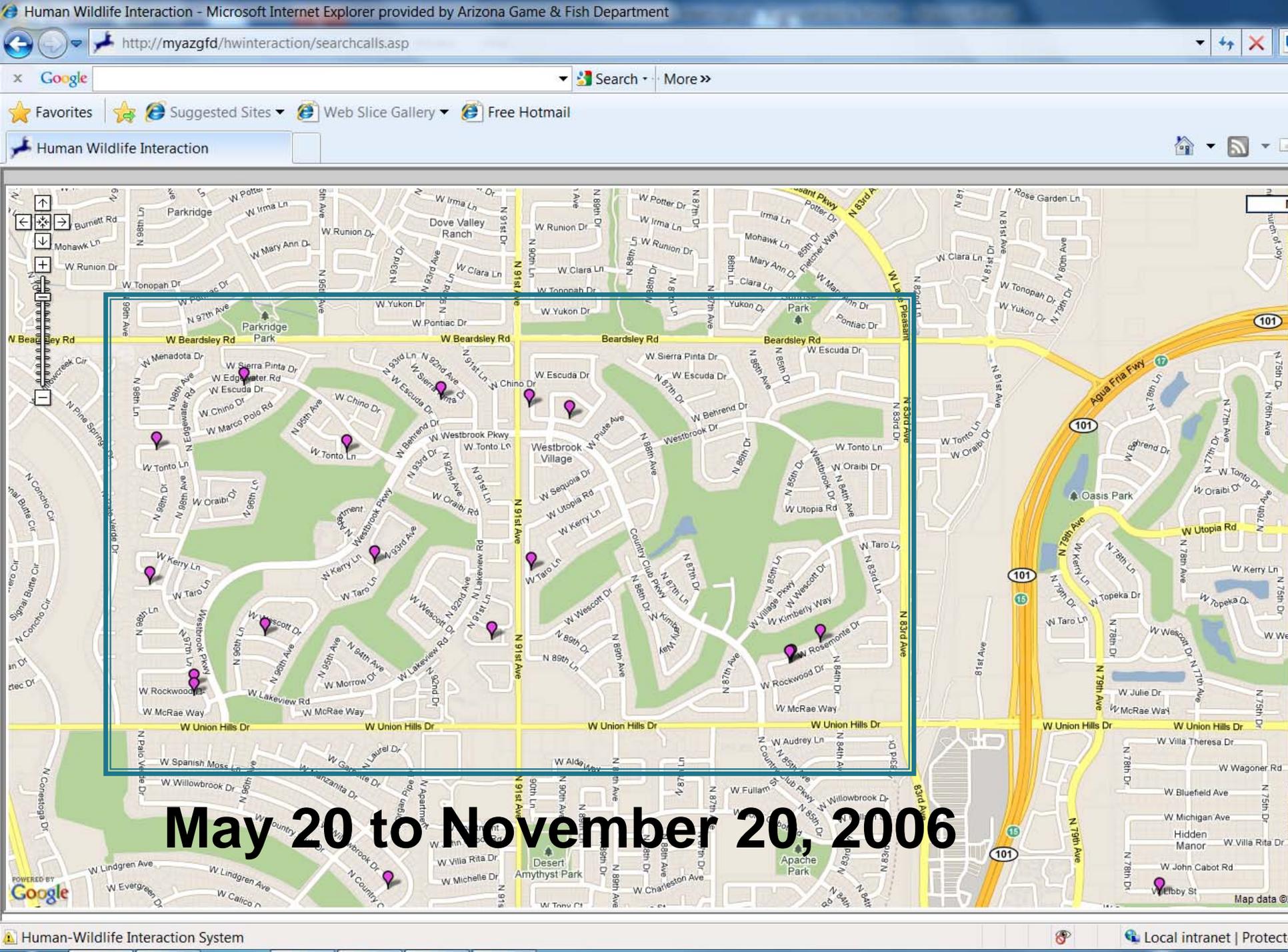
COMMUNITY ACTION PLAN

RESOLVING URBAN WILDLIFE CONFLICTS

Premise: Most wildlife problems result from human behaviors that create opportunity for wildlife. Wildlife simply reacts to the available opportunities, particularly when there are no negative consequences for doing so. Only humans have the ability to modify their behavior to minimize negative conflicts with wildlife.

The mission is to organize a community-based effort in education, communication and coordination for management of urban wildlife and conflict issues.





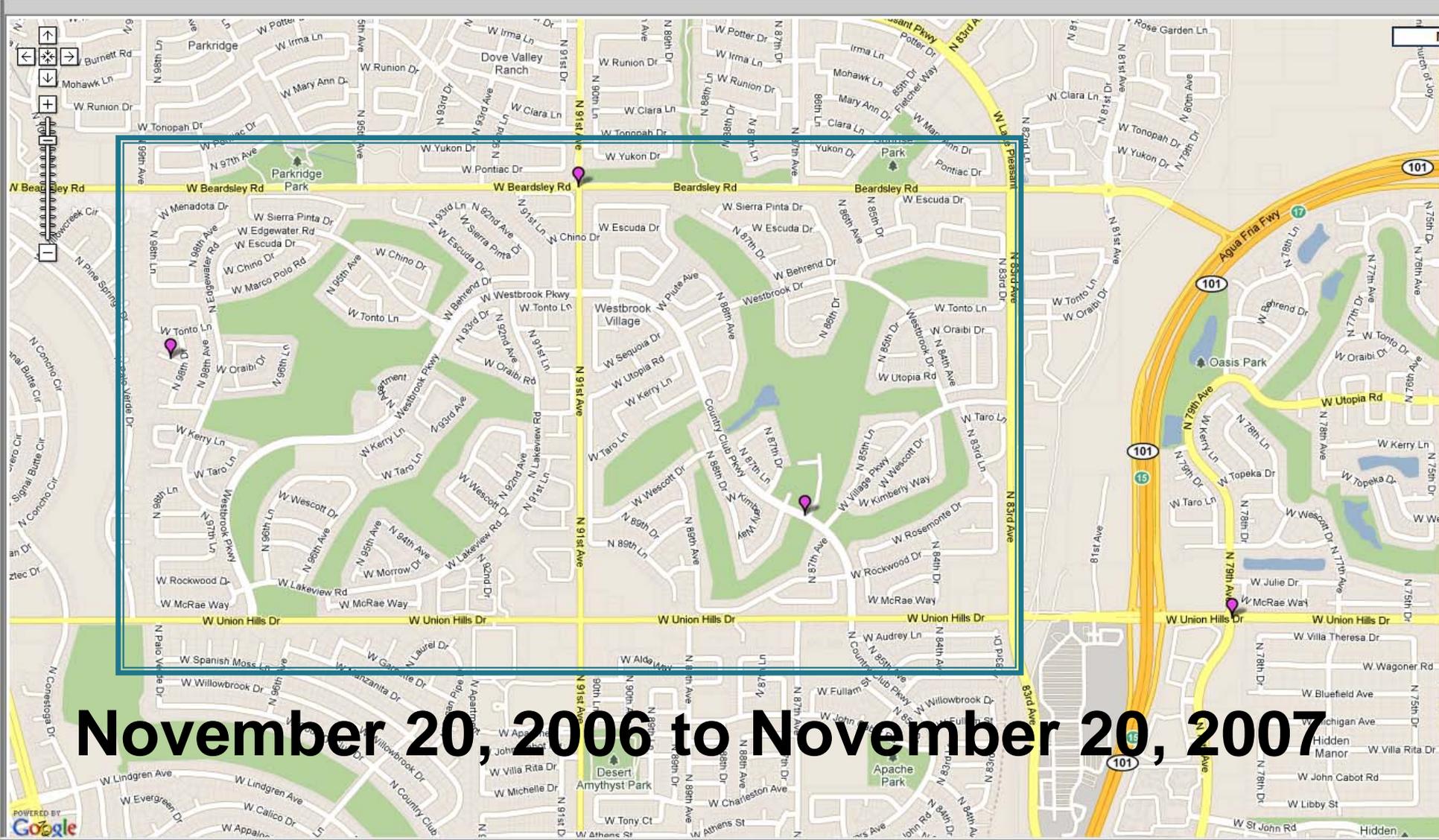
http://myazgfd/hwinteraction/searchcalls.asp

Google Search More >>

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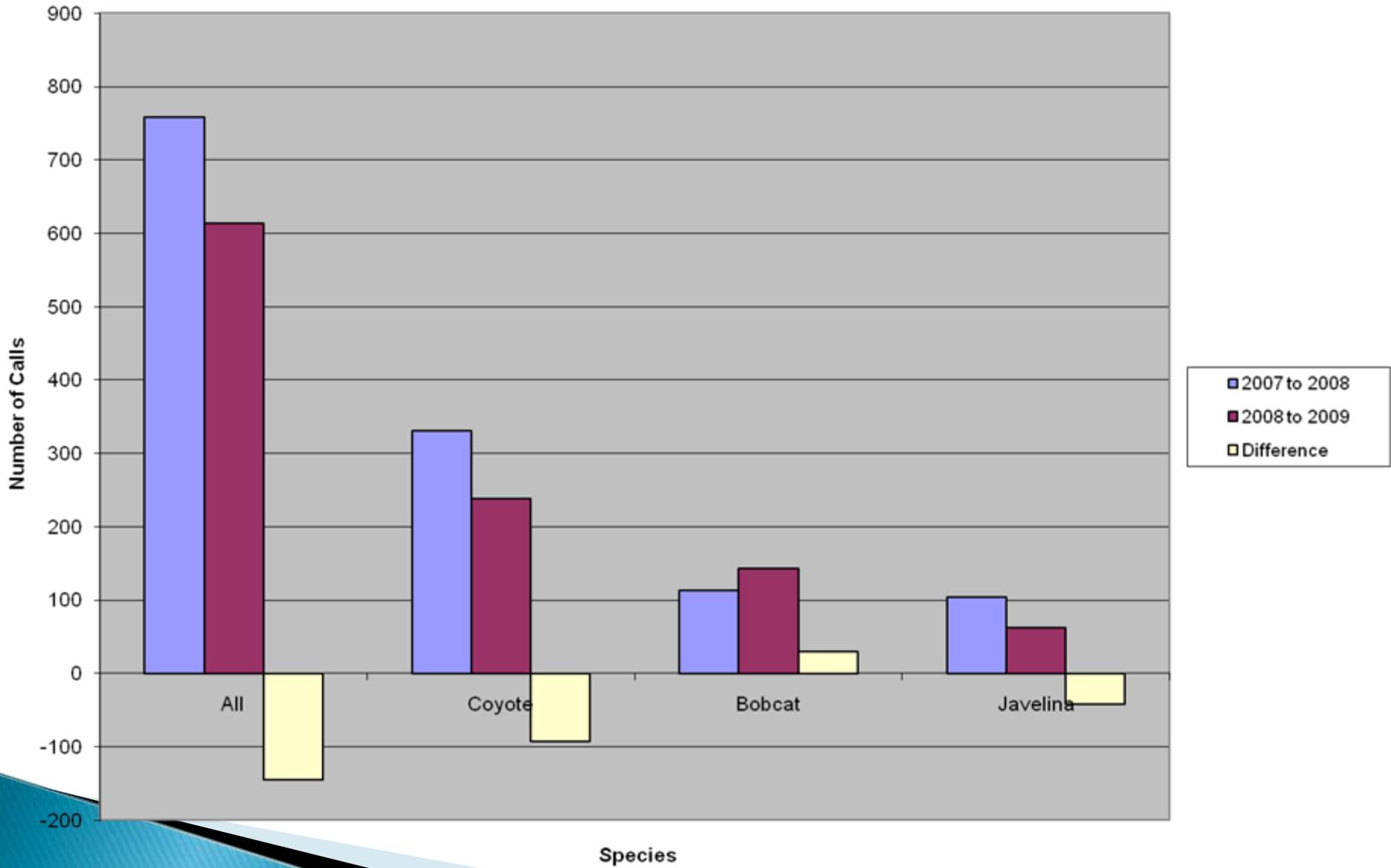
Human Wildlife Interaction

May 20 to November 20, 2006

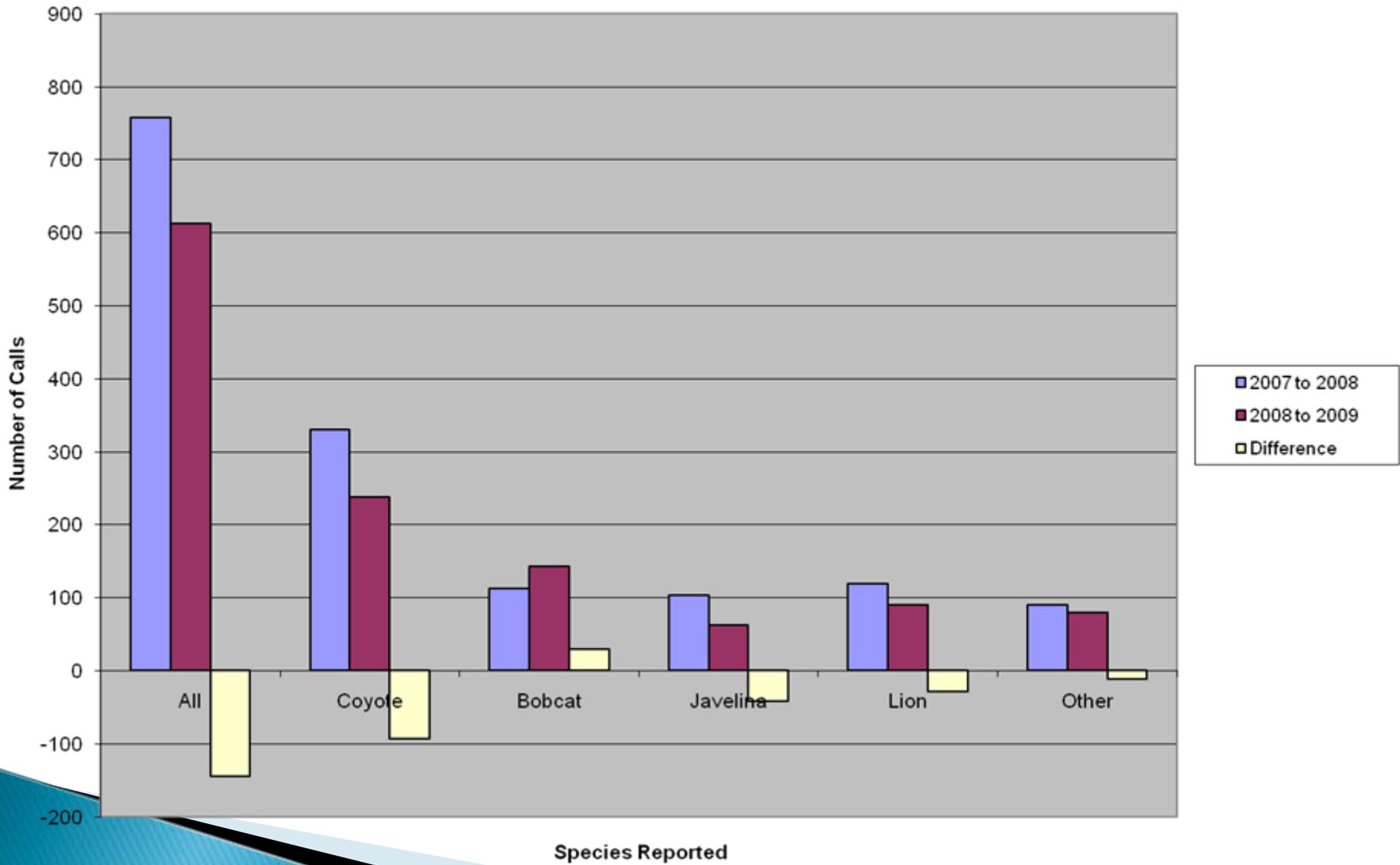


November 20, 2006 to November 20, 2007

Human-Wildlife Conflicts Region VI



Human-Wildlife Conflicts Region VI

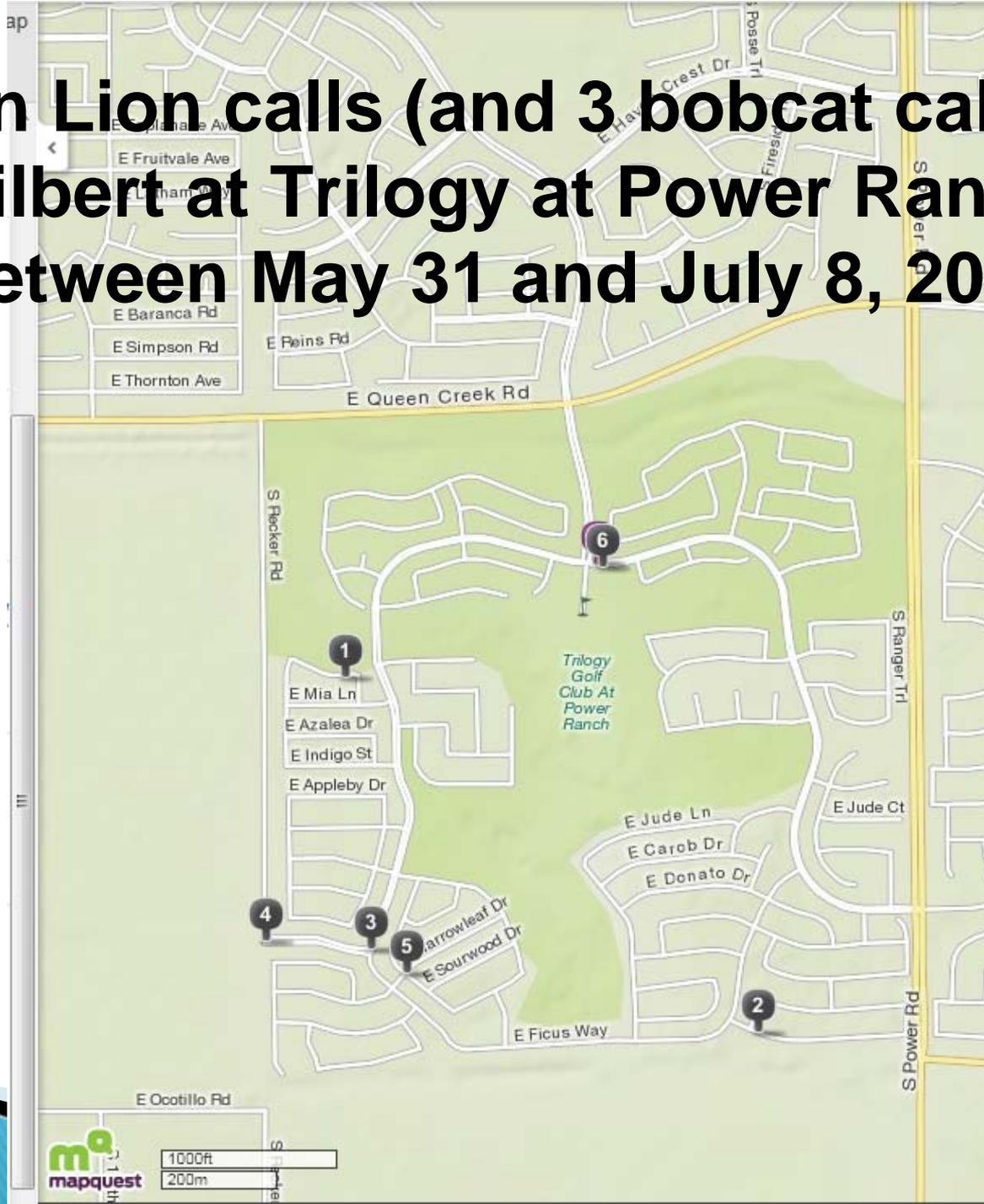




Mtn Lion Calls (299) June, 2008 to June, 2011

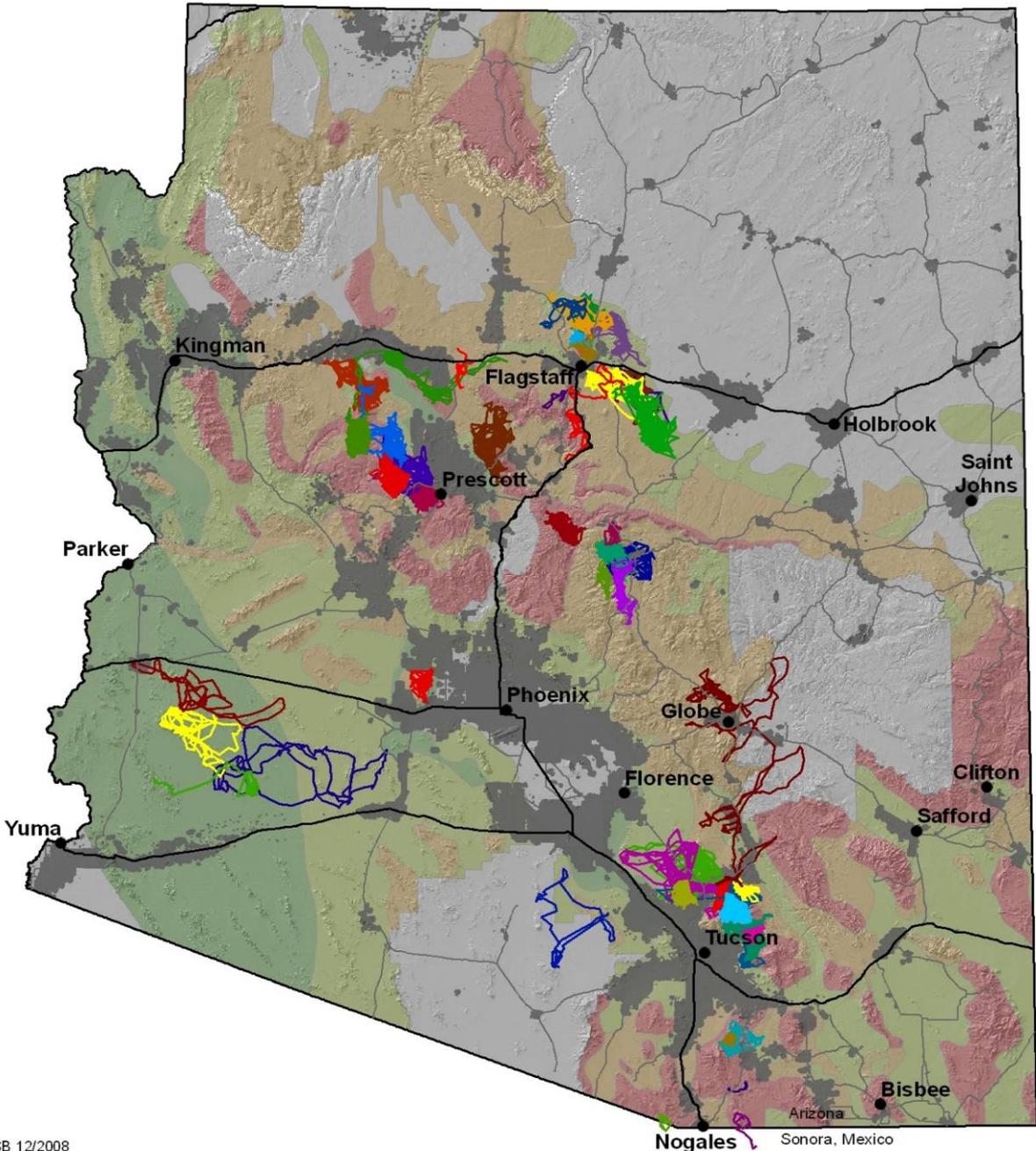


6 Mtn Lion calls (and 3 bobcat calls) in Gilbert at Trilogy at Power Ranch between May 31 and July 8, 2010

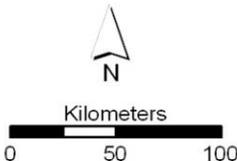


Movements from GPS Collared Lions and Distribution Densities

Lines indicate movements
of individual animals. Data
collected from 8/2005 - 12/2008



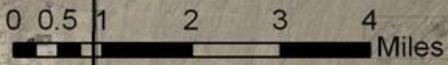
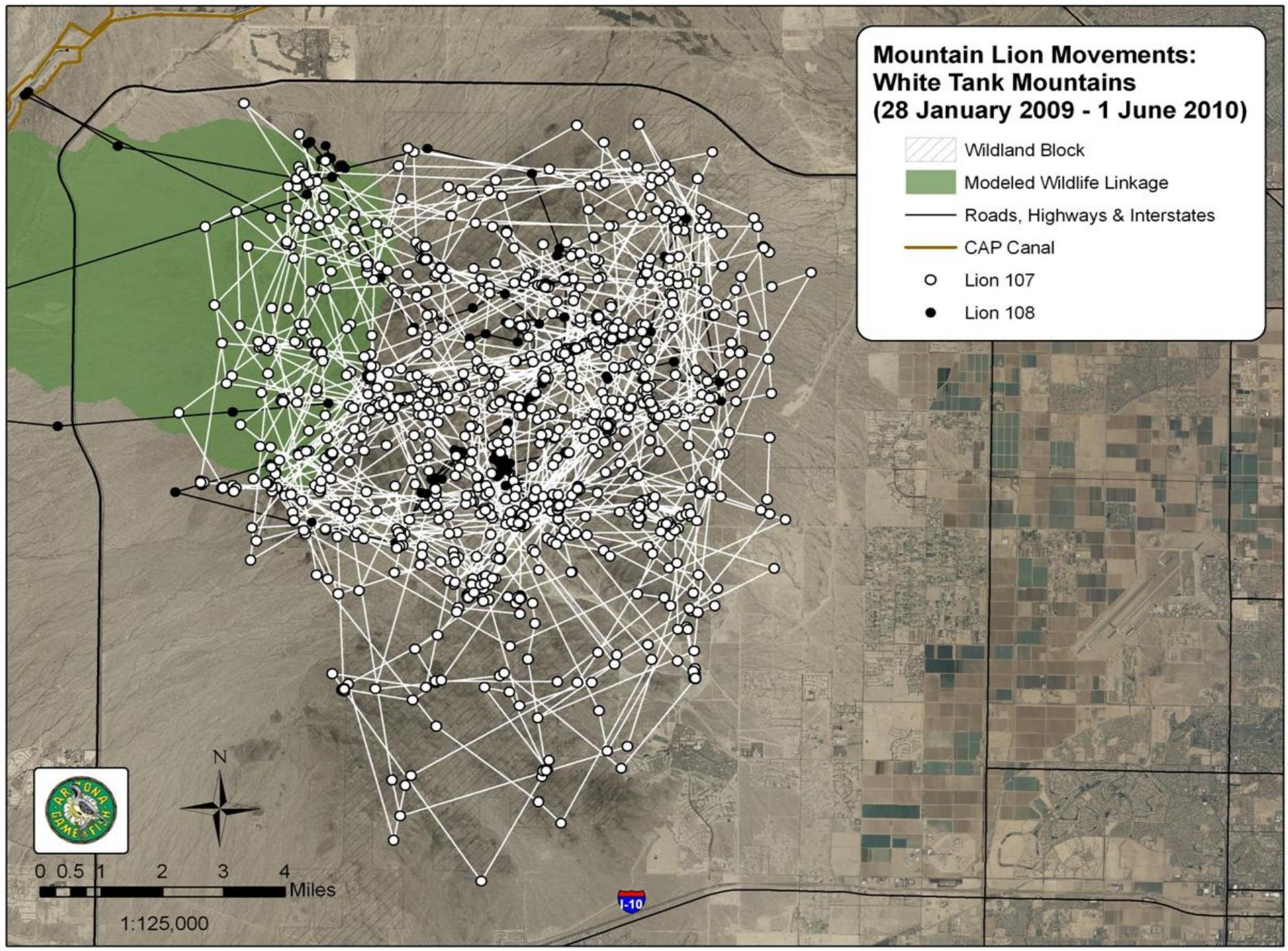
- Urban Growth 2050
- High (0.05-0.10 lions per square mile)
- Medium (0.01-0.05 lions per square mile)
- Low (0.005-0.01 lions per square mile)
- Sparse (0-0.005 lions per square mile)



Data Sources:
AGFD, USGS, Kofa NWR

Mountain Lion Movements: White Tank Mountains (28 January 2009 - 1 June 2010)

-  Wildland Block
-  Modeled Wildlife Linkage
-  Roads, Highways & Interstates
-  CAP Canal
-  Lion 107
-  Lion 108

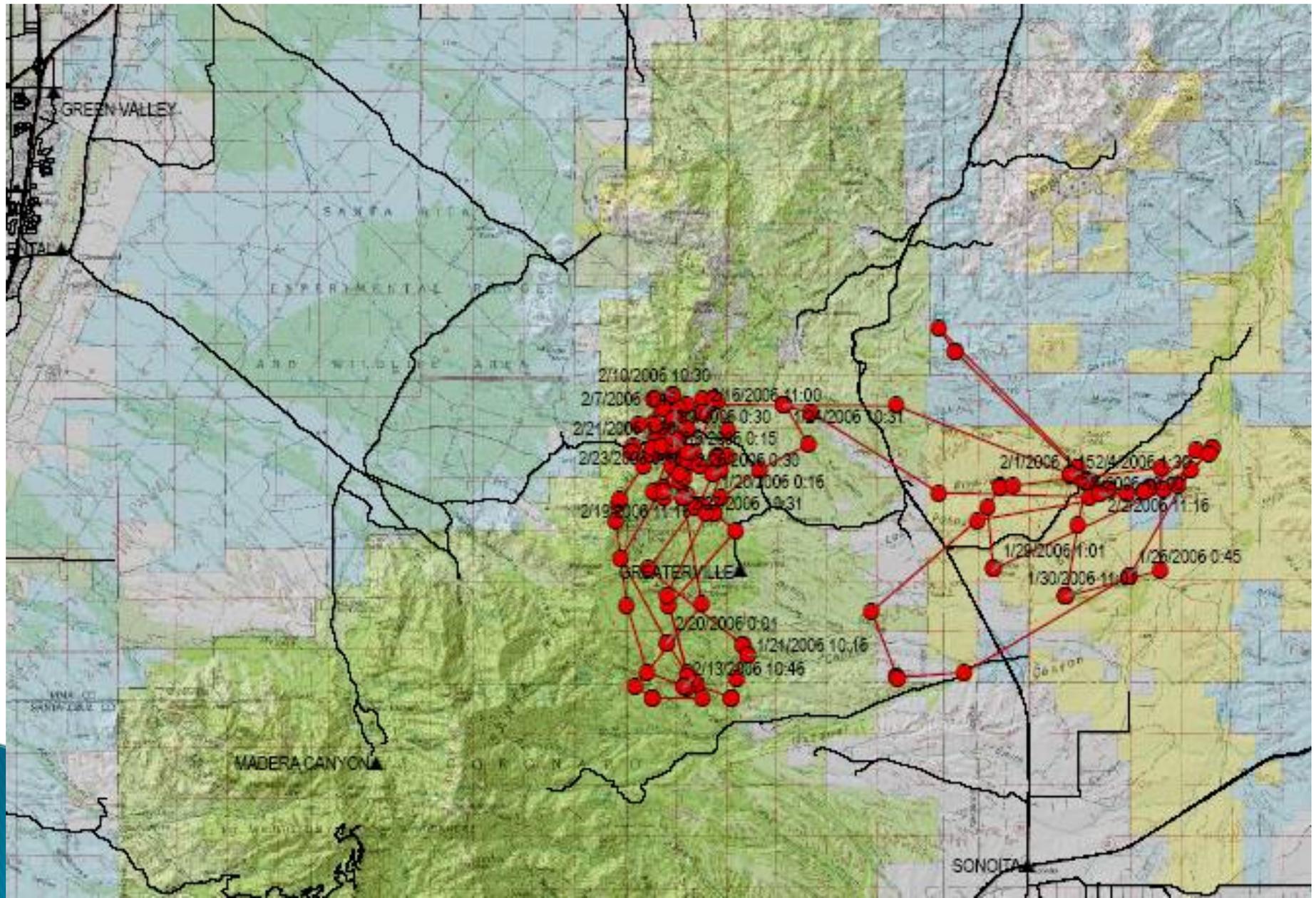


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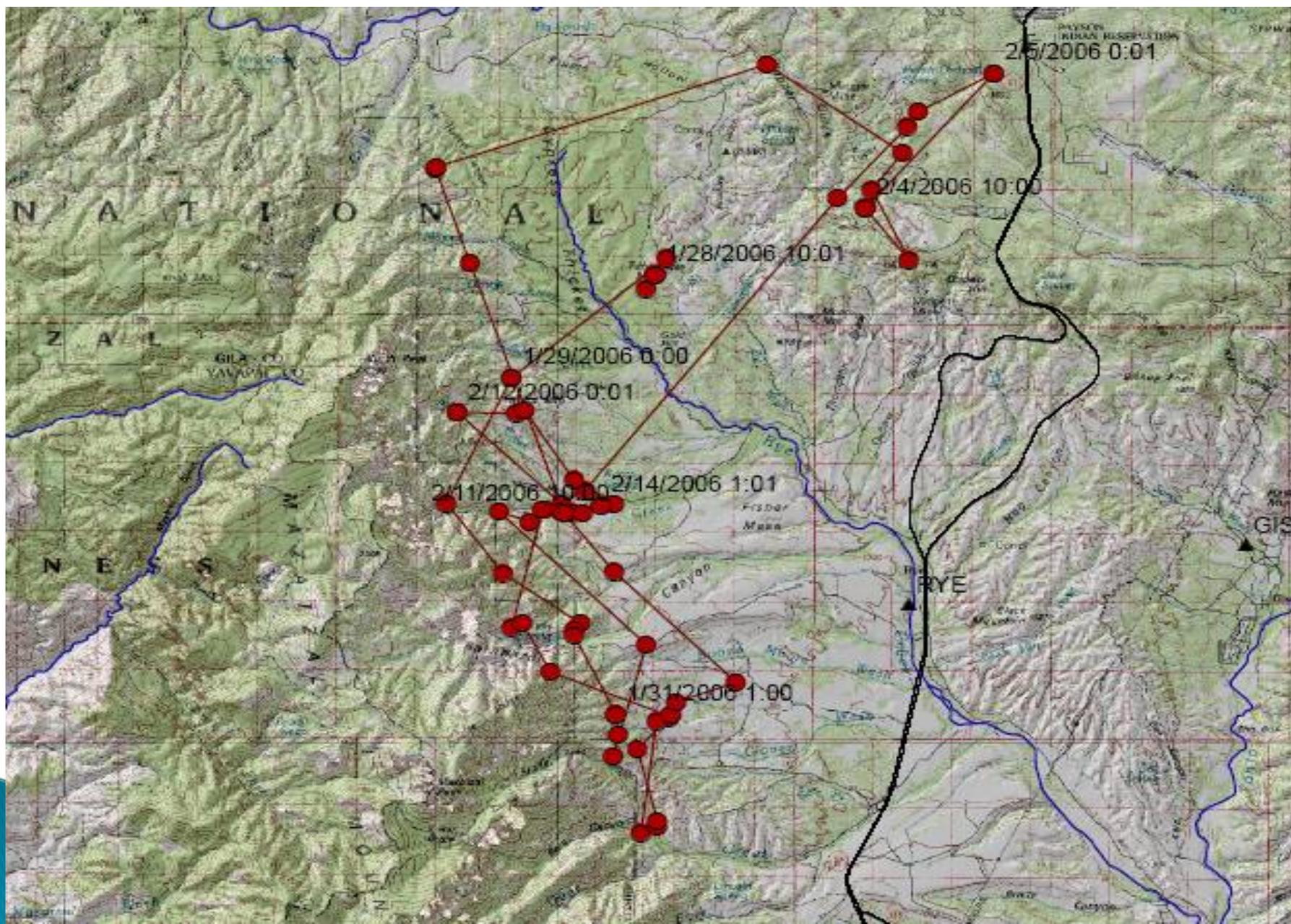




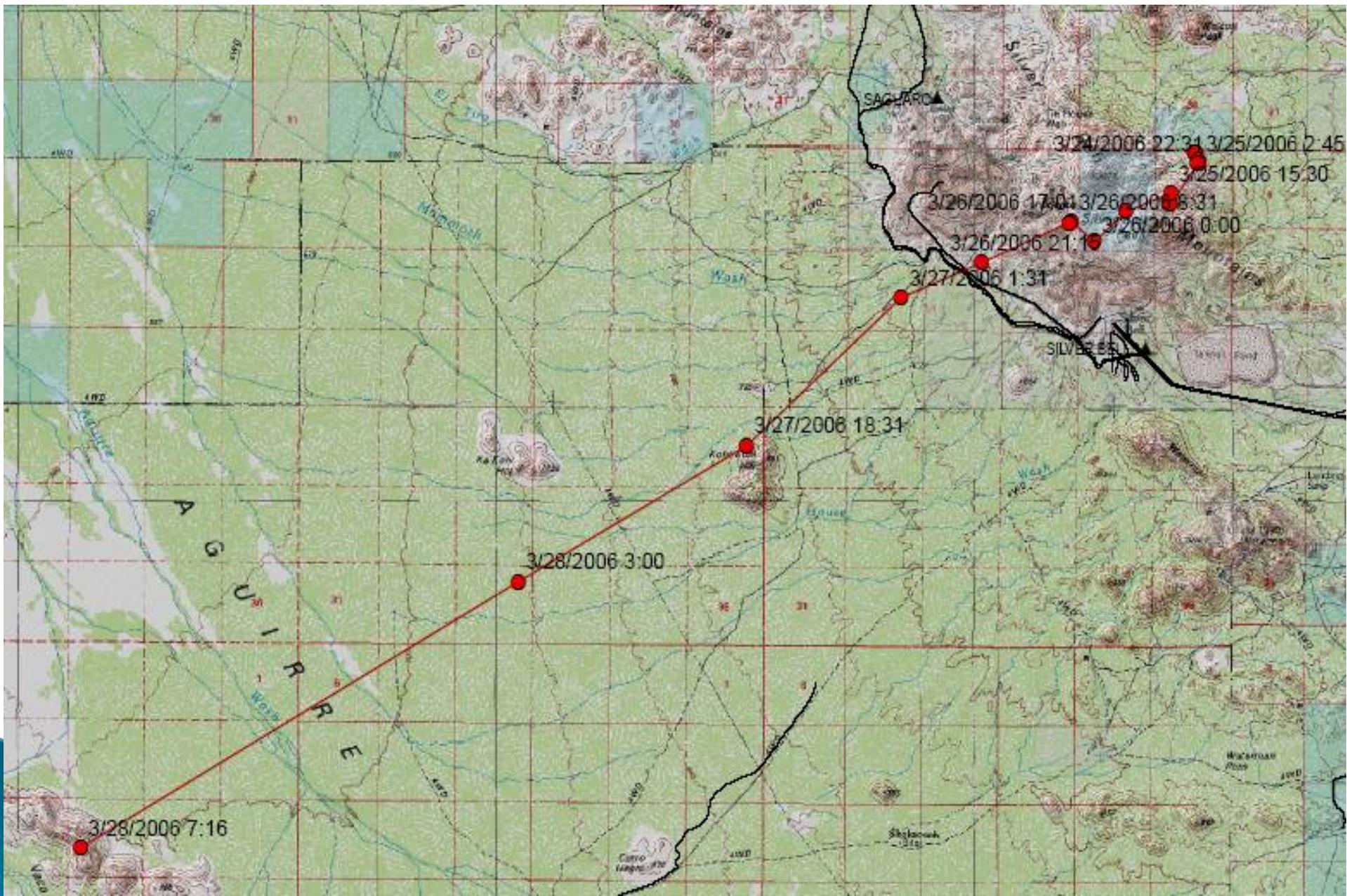
Santa Rita Mountains – Female



Payson Area – Male



Silver Bell Mountains – Male



Arizona Game and Fish Department

Proposed Revision of Lion/Human Interaction Protocol

*THIS DOCUMENT CONTAINS PRIVILEGED COMMUNICATIONS
PRIVILEGED COMMUNICATIONS ARE NOT FOR PUBLIC DISCLOSURE*



Executive Staff Report

Prepared by:

Mike Senn, Assistant Director, Wildlife Management Division
Chasa O'Brien, Branch Chief, Research Branch
Ron Thompson, Large Predator Biologist, Game Branch

July 8, 2009

Alternatives

- **Alternative A:** No Change to Existing Plan
 - **Alternative B:** Use GPS Collars on Lions Solely for Research and Education Purposes
 - **Alternative C:** Adaptive Management: Place GPS Collars on Mountain Lions on an “As Needed” Basis
 - **Alternative D:** Geofence Lions with GPS Collars on Lions on an “As Needed” Basis
 - **Alternative E:** Do Not Place Radio-Collars on any Large Carnivores
- 

Recommendations

1. **Implement use of Alternative A: No change to existing Action Plan, and Alternative B: Use GPS technology on lions solely for research and education purposes.**

Rationale: Individual mountain lions seemed to be highly variable in their use of residential-urbanized areas. Previously studied mountain lions have entered some residential-urbanized areas frequently, explored some briefly and left, simply moved through some areas, and used others as part of their normal habitats. Despite extensive or occasional use of residential-urbanized habitats by marked mountain lions, local residents seldom reported encounters or sightings, except when an animal was killed by hunters or a vehicle. Recent research in northwestern states also suggests that mountain lions commonly encounter residential-urbanized areas.

Based upon our analysis, attempting to radio collar and monitor all lions that may pose a risk to public safety due to their proximity to humans or urban environments would create some substantial obstacles in the areas of: 1) liability; 2) difficulty of defining acceptable or unacceptable lion behavior in terms of the presence, proximity, frequency, duration or proximity of lion to humans; difficulty in defining areas to geofence and setting and monitoring appropriate alarms; and 3) use of this technology to monitor lion behavior and location is likely to put a significant strain on existing Department resources.

Additional Actions Recommended: In order to implement these recommendations, the following additional action items are recommended.

1. Draft a new Department policy on the use of GPS radio collars for research or educational purposes. The new policy would provide direction and establish protocols to address the use of GPS radio collars, how and when additional information obtained from GPS technology may be used. This may include research and data as it relates to livestock depredation and predator/prey relationship studies or educational purposes.
2. Modify the existing Action Plan to explicitly state that lions will not be radio collared to monitor lion behavior, and that any lions radio collared for research or educational purposes will not be monitored for the purposes of determining acceptable or unacceptable lion behavior as defined in the Action Plan. It should also be modified to allow for the use of location data of any radio collared lion to expedite the capture or removal of a lion if it is deemed that the lion should be removed based upon observable lion behavior as currently defined in the Action Plan.

TASER for WILDLIFE

STATE OF ALASKA DEPARTMENT OF FISH AND GAME STANDARD OPERATING PROCEDURE		NO III-73
SUBJECT TASER ELECTRONIC CONTROL DEVICE USE/SAFETY		ISSUE Febru
CHAPTER ADMINISTRATIVE PROCEDURES		APPR Tom

PURPOSE

This policy sets forth TASER brand Electronic Control Device (ECD) equipment sa Department of Fish and Game.

DISTRIBUTION

Posted on the Administrative Information Center at the following web address:
<http://intra.dfg.alaska.local/QRHome/Admin/QRAsops.html>

RESPONSIBILITIES

1. As set forth in SOP III-700, each Division Director, Regional Supervisor, P shall be accountable for the enforcement of this SOP. All field personnel, v ECD and related equipment, will be given industry standard Taser use and issuance; project leaders will be responsible for ensuring field staff is propo ECDs and related equipment. Training must be provided by a Taser Inc. ce agency standards. Division instructors must be trained by a Taser Inc. certifi Master Instructor to industry and agency standards.
2. The Project Leader shall coordinate with a Taser certified instructor and sha ECDs and related equipment used in conjunction with an employee's job pe and State Standards. All Taser ECDs and related equipment will be mainta working condition and will be performance checked before being taken into standards.
3. Employees who are directed to work with inadequate or unsafe ECDs shall

*Courtesy of Larry Lewis
Larry Lewis is a
Wildlife Technician
for the Alaska
Department of
Fish and Game's*

contacted the Alaska Department of (ADFG) Division of Wildlife Conse for assistance. Wildlife technician called on to respond.

Comparative Study of Capture Techniques in Javelina

Hanna, J., Grandmaison, D., Searles, L., Dawes, D., Lewis, L., Mooney, P., Hinz, A., Carver, M.

- * Arizona Game and Fish Department
- + Southwest Wildlife Conservation Center
- ^ Lompoc Valley Medical Center
- * Alaska Department of Fish and Game
- TASER International

Introduction

While chemical restraint delivered by a gun powder, gas, or mouth-propelled dart (depending on the application) provides a less stressful wildlife restraint method and has decreased the incidence of capture myopathy in some species, this method has the disadvantages of requiring special control and handling of DEA controlled substances as well as other potential negative consequences including: 1) trauma from the dart (both impact, and rapid injection), 2) prolonged vulnerability for the captured animal if not attended (e.g., predators, environmental exposure, etc.), 3) overdose, 4) lost darts (sharps hazards and lost controlled substances), 5) back drop concerns depending on the scenario, 6) secondary injuries due to sedation (falls, drowning, etc.), particularly for medications with a longer onset of action where the animal can flee, 7) risk to staff with handling of the drugs, and 8) contamination of meat (if the animal could possibly be used for food at some point later). Furthermore, because dosing is imprecise, it is possible to have partially sedated animals on approach, requiring additional medication delivery (and possibly at close range). In addition, due to partial effect or the long onset of effect, the user must be prepared to defend him or herself against a possibly confused animal.

The use of electronic control devices, commonly used by law enforcement for human restraint, may offer the ability to effect short-term restraint to allow very brief interventions (e.g. disentanglement, tagging, TASEKS to control aggressive and combative people.





RITTER



Mike Ritter
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TRIBUNE

Questions?