

Rabies Update Arizona



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Rabies Statistics



- 2008: broke record annual lab confirmed rabid animals
- 5/03/09 YTD: 108
- 2009: expect to break record

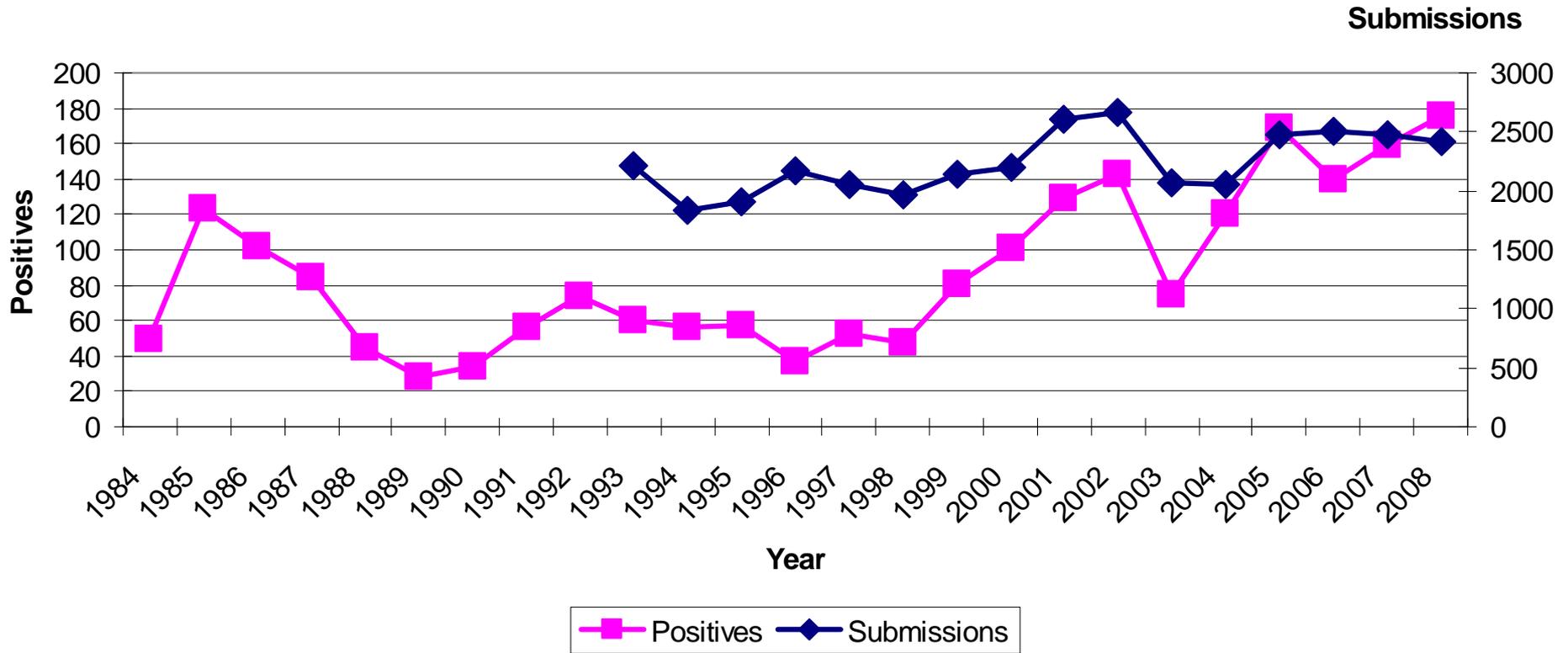
Year	Rabid Animals
2001	129
2002	143
2003	75
2004	120
2005	169
2006	140
2007	159
2008	176

Reason for Increase?

- Simultaneous epizootics
- Endemic area expanding
- Better surveillance
 - AGFD
 - USDA APHIS WS
 - Animal control
- More human population encroaching in wild animal territory

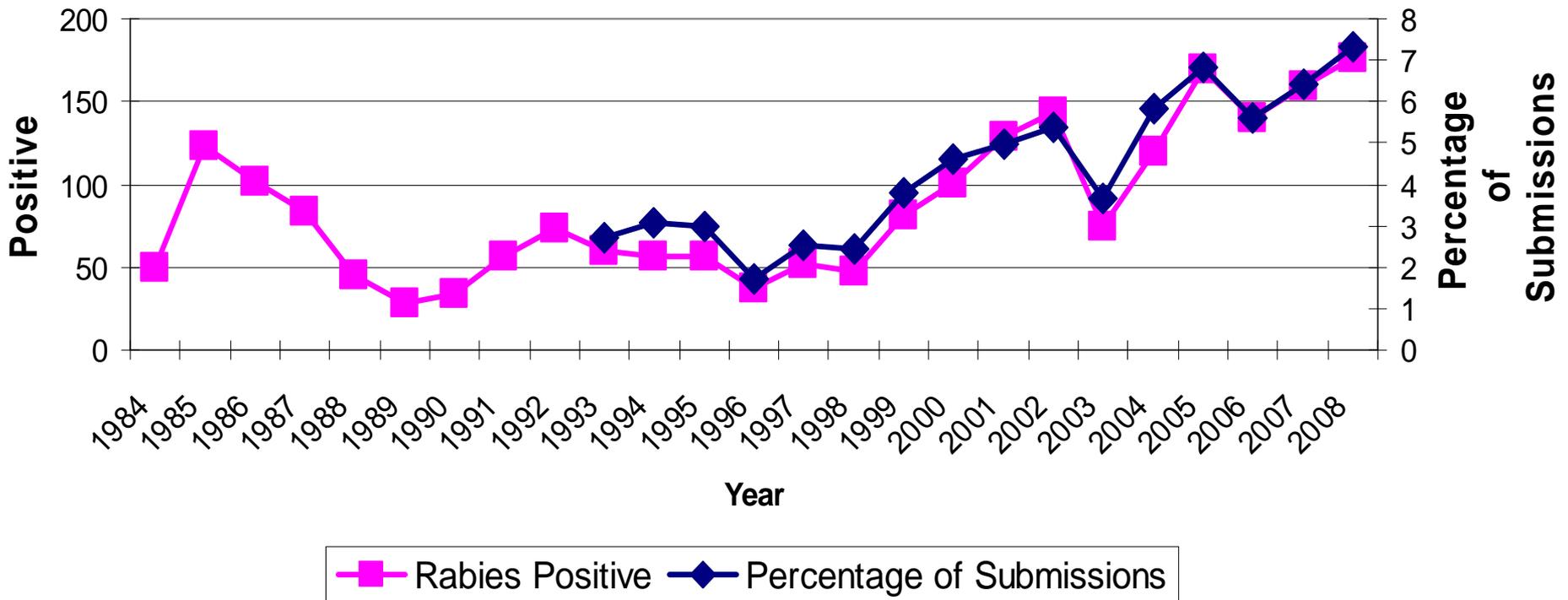
Rabies in Arizona 1984 - 2008

Comparison of Positives and Total Submissions to ASHL

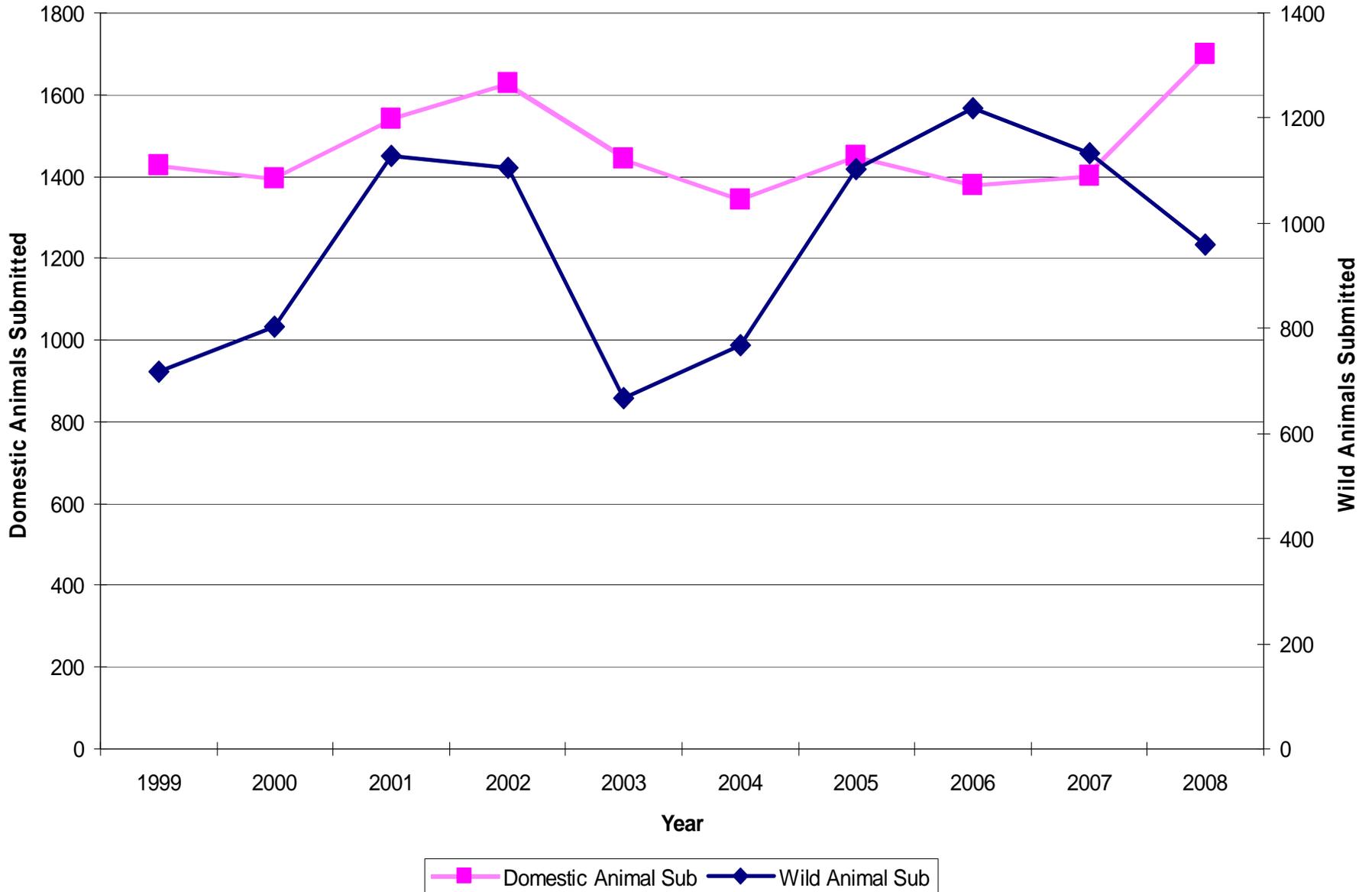


Rabies in AZ 1984 - 2008

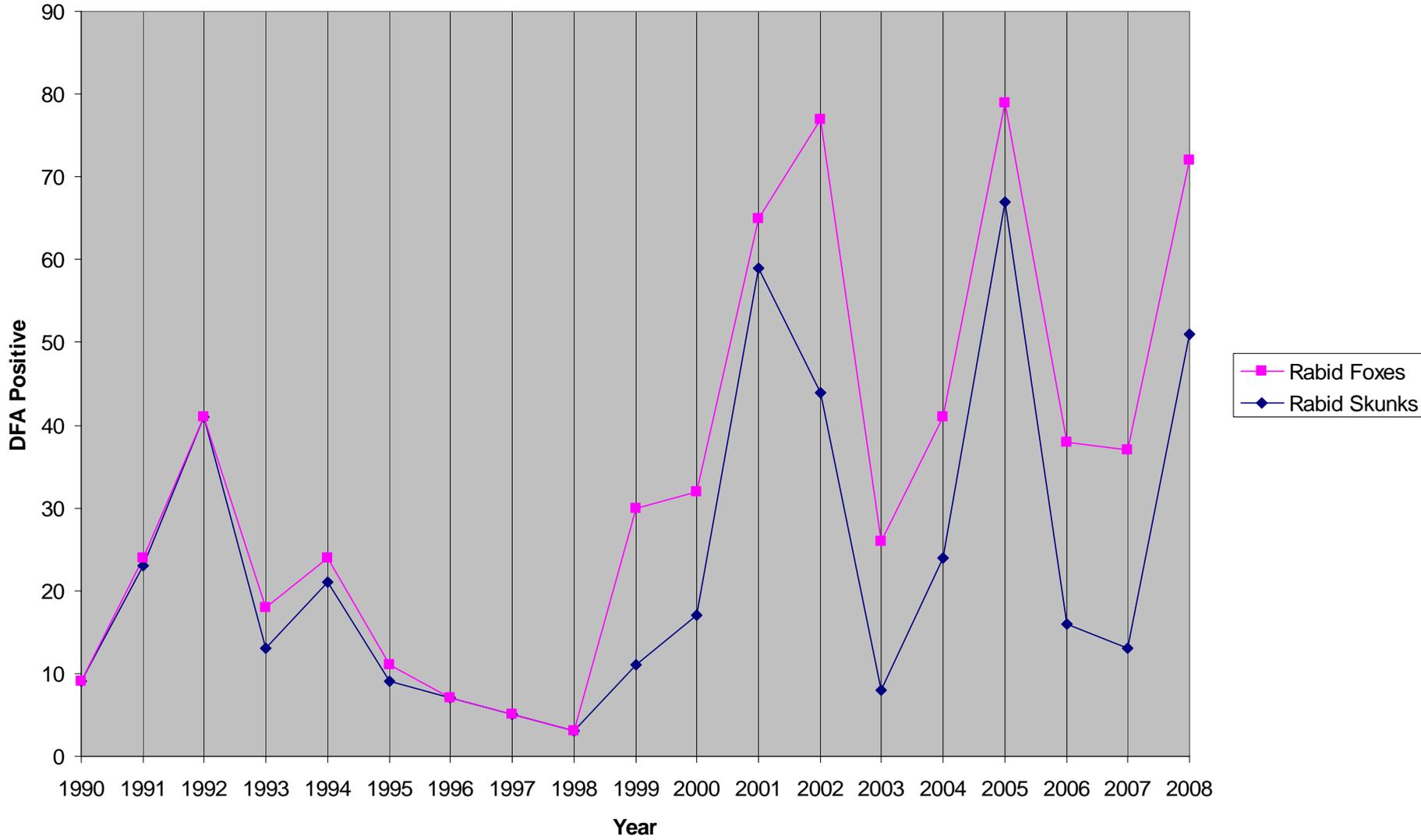
Comparison of Positives & Percent of Submissions Positive



Domestic and Wild Animal Submissions 1999 - 2008

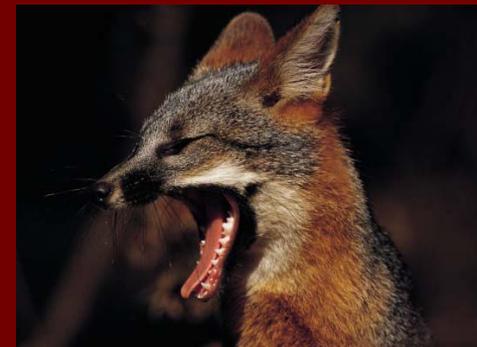


Rabies by Species



Lab Confirmed Rabid Animals 2008

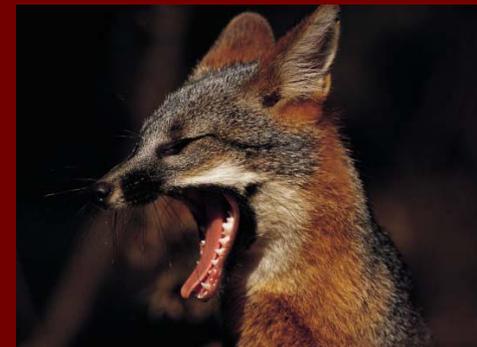
- 89 bats
 - Pima County- **42**, Maricopa County- 21
- 51 skunks (out of 234 tested)
 - vs. 13 in 2007
 - 19 in Pima, 13 Santa Cruz, 7 Pinal, 7 Cochise
 - 2 in **Coconino**, Greenlee, & Yavapai counties
- 21 foxes
 - Greenlee County – 7 & continued spread into New Mexico (TX, NM, AZ, USDA meeting on gray fox rabies: studies, ORV)
 - 3 in **Coconino**



Lab Confirmed Rabid Animals 2008

■ Other animals:

- 7 coyotes
- 4 coyotes
- Mountain lion (Verde River-Yavapai County)
- Coati (Oracle- Pinal)
- Dog (eastern Pima)- valuable hunting dog
- Horse (Morristown- Maricopa)- *Mexican free tailed bat variant*



Rabid Bobcat on the Rise

- One rabid bobcat in 7 counties
- geographically & time-spread out
- CDC & USDA interested in whether bobcats could be a new reservoir
- Entire head being sent to CDC- salivary glands
- DNA sequencing of virus in bobcats versus foxes



Dramatic Stories

- BBC: "Attacked jogger takes fox for run"
- Foxy Lady has Rabid Following
- Most of these stories seem to emerge in Yavapai County (e.g. mtn lion early 2008)



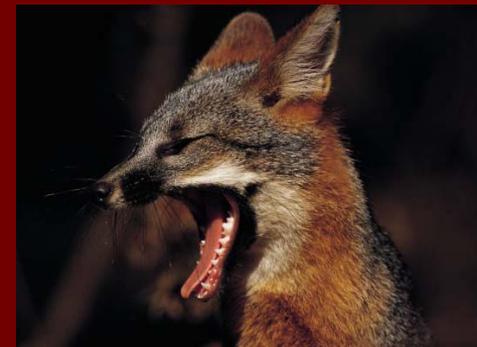
Exposures to Lab Confirmed Rabid Animals - 2008

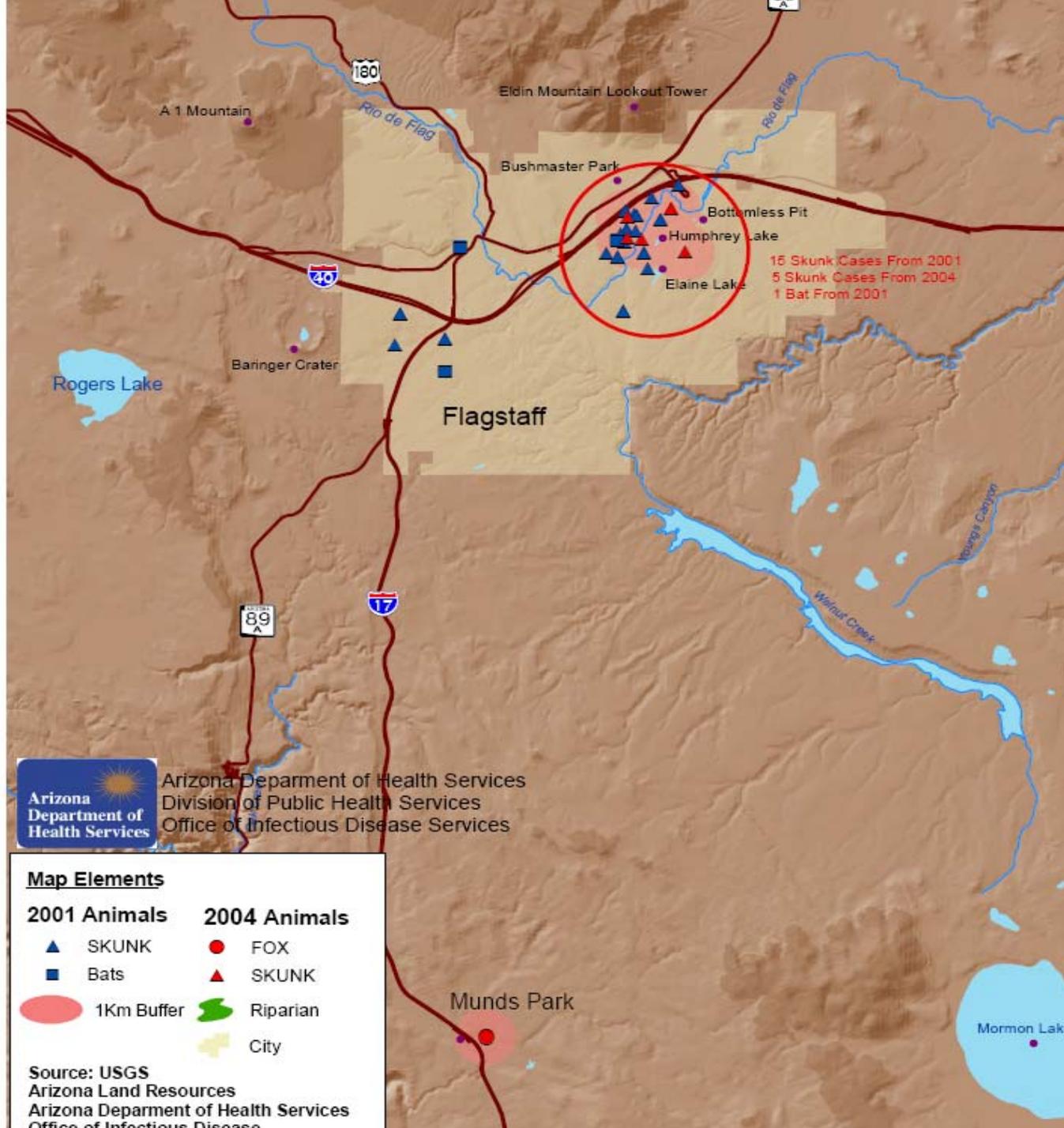
- 43 humans & 122 domestic animals
- 10 dogs & 3 humans exposed to rabid dog from Pima County
- 12 dogs possibly exposed to skunk in Pima County
- 6 cats exposed to one bat in Gila County (35 feral cats in area)
- 3 rabid bat at school incidents with human exposures (3, 1, 2 exposures + 1 w/o exposure)

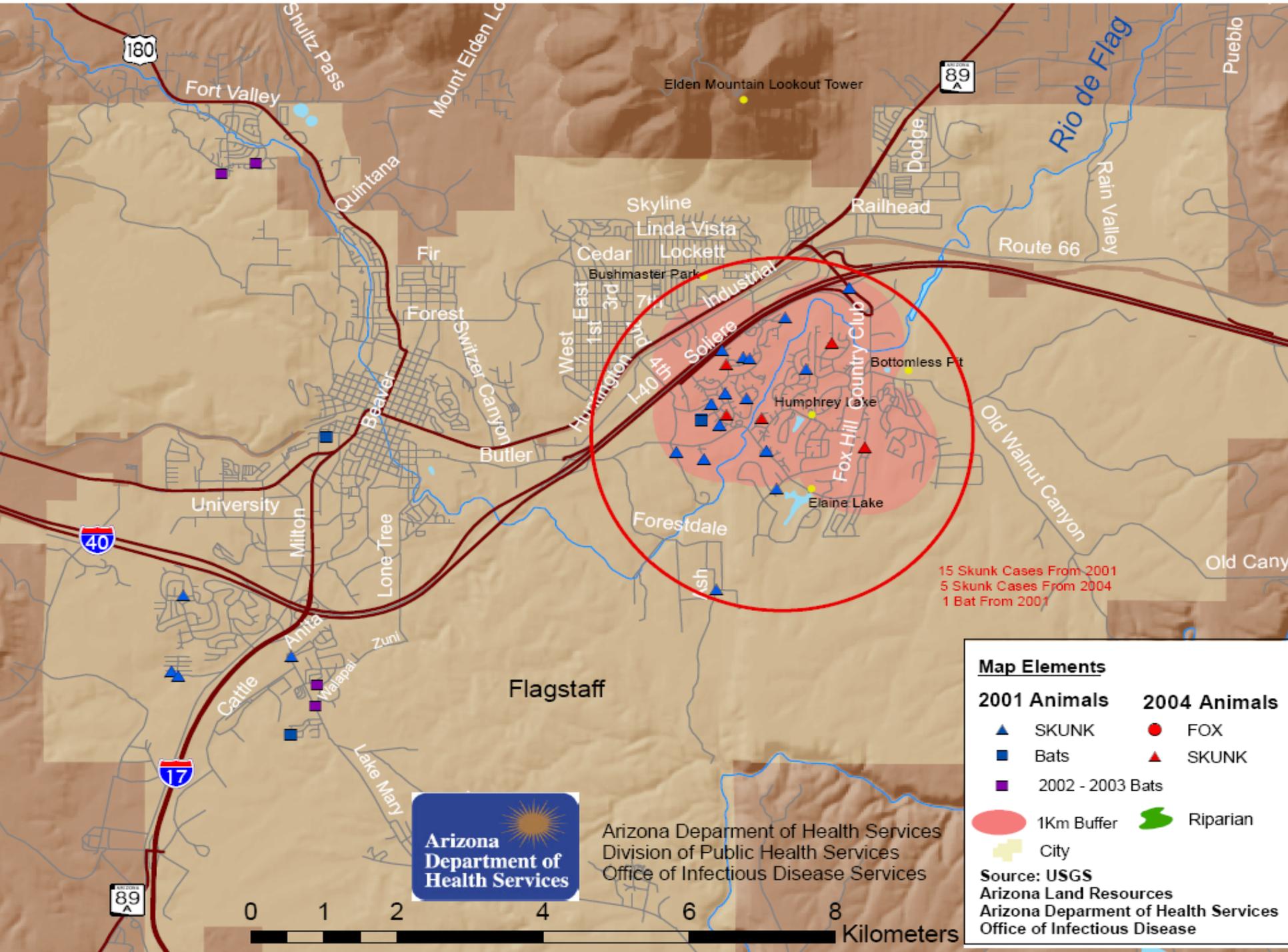
Lab Confirmed Rabid Animals

2009 YTD, 5/3/09

- 5 bats, many more to come
- 63 skunks
 - 28 in Pima, 17 Cochise, 11 Santa Cruz, 2 Pinal, 5 in Coconino
- 33 foxes
 - 16 in Coconino: big brown bat variant; suspected spread from skunk to fox; now fox to fox
 - Quarantine, ORV possible: Coconino county will present
 - 9 Pima, 5 Yavapai, 1 Maricopa (Gila Bend)







15 Skunk Cases From 2001
 5 Skunk Cases From 2004
 1 Bat From 2001

Map Elements

- | 2001 Animals | 2004 Animals |
|--------------------|--------------|
| ▲ SKUNK | ● FOX |
| ■ Bats | ▲ SKUNK |
| ■ 2002 - 2003 Bats | ● Riparian |
| ○ 1Km Buffer | ■ City |

Source: USGS
 Arizona Land Resources
 Arizona Department of Health Services
 Office of Infectious Disease



Arizona Department of Health Services
 Division of Public Health Services
 Office of Infectious Disease Services



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News Release

FOR IMMEDIATE RELEASE

From: Coconino County Health Department
Contact: Trish Lees
928-679-7331
Date: April 7, 2009

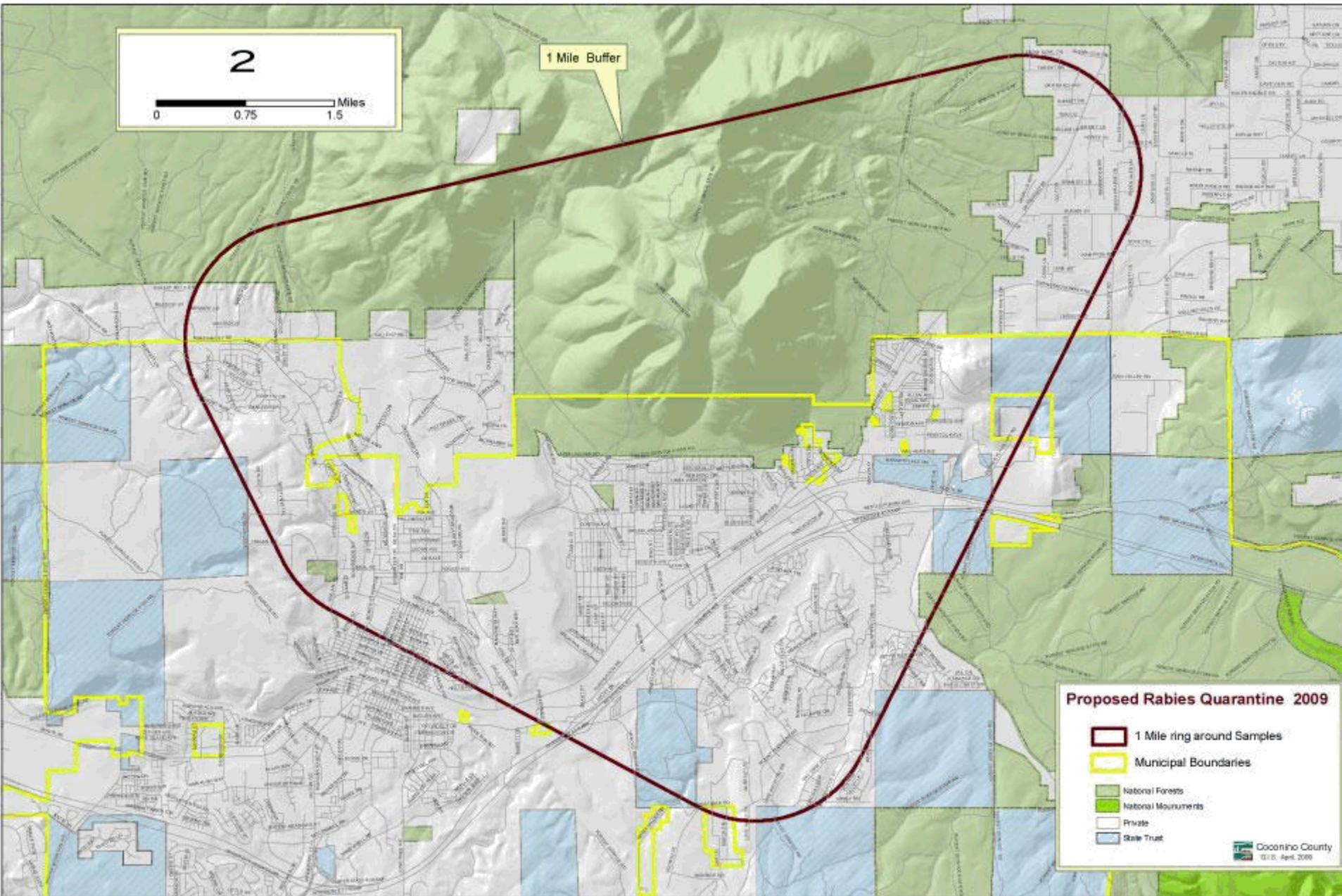
Coconino County Board of Supervisors Declares Rabies Quarantine

Flagstaff, Arizona - Due to a substantial increase in the number of rabid wild animals found in and around the Flagstaff area, the Coconino County Board of Supervisors has declared a Rabies Quarantine. The Quarantine, which begins Wednesday, April 8, 2009, places restrictions on cats and dogs in areas in and around Flagstaff. (A map detailing the Quarantine area is available at www.coconino.az.gov/health.) The Quarantine, which will remain in effect for up to 90 days, also places certain restrictions on feeding and interacting with wildlife.

Between October 31, 2008 and March 31, 2009, 14 foxes, six skunks and one ringtail cat within the Flagstaff urban area have been tested and confirmed to be infected with rabies.

Rabies is a viral infection that affects the nervous system of mammals, including humans. The disease is almost always fatal when not treated. Rabies can be transmitted from wild animals to pets such as cats and dogs, making human exposure a real possibility.

“Because wild animals can become very aggressive when rabid, there is a high level of concern regarding public safety and the safety of domestic animals. The quarantine has been enacted by the Coconino County Board of Supervisors in an effort to prevent the spread of the

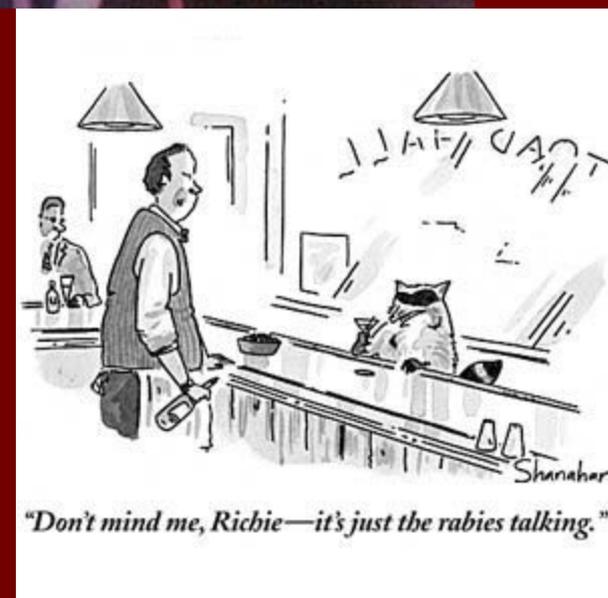


Exposures to Lab Confirmed Rabid Animals- 2009

- 17 humans & 62 domestic animals
- Other rabid animals: 3 bobcats, 1 ringtail, cow, horse

Dramatic Stories

- “Bobcat walked into a bar . . .”

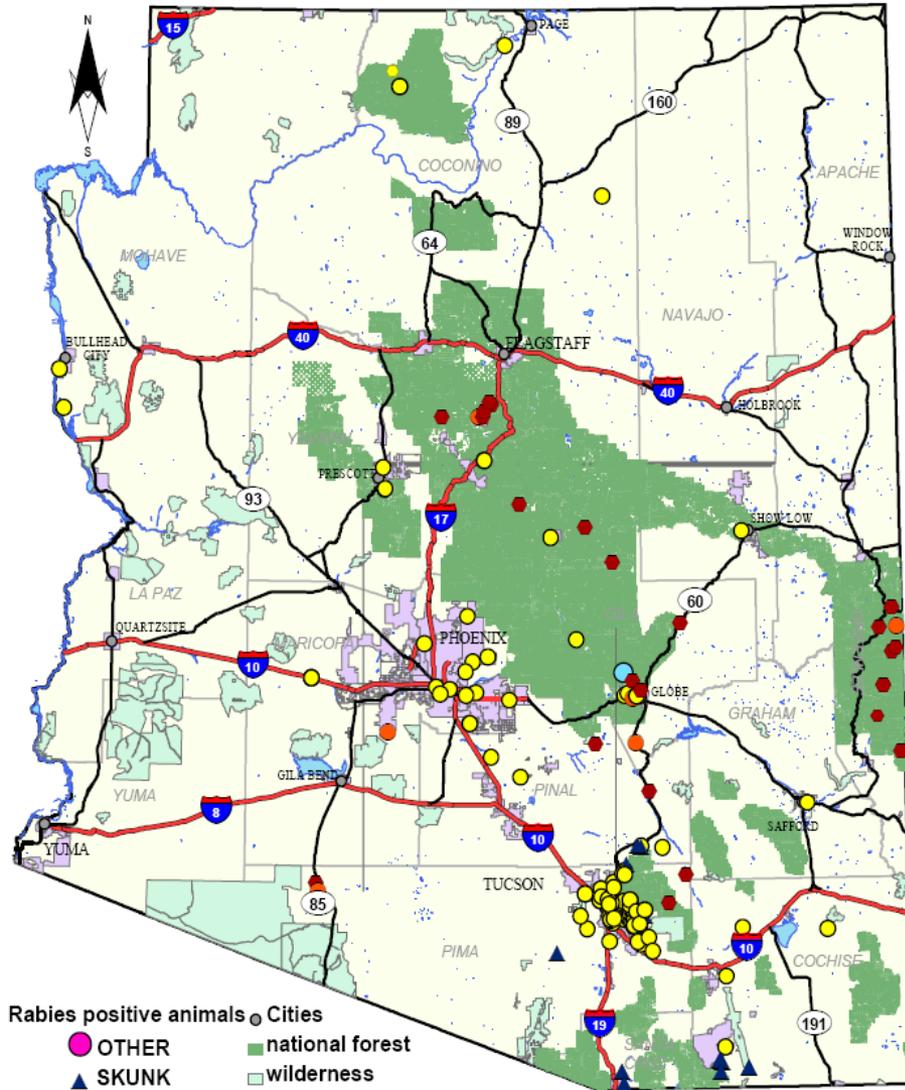


Dramatic Stories

- PRESCOTT VALLEY - Prescott Valley police shot & killed a bobcat after it attacked & injured a teenage girl and her mother

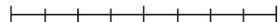


Rabies Positive Animals Arizona 2007



- Rabies positive animals ● Cities
- OTHER
 - ▲ SKUNK
 - BOBCAT
 - COYOTE
 - FOX
 - BAT
 - national forest
 - wilderness
 - limited access highway
 - highway
 - lakes

0 25 50 100 Miles



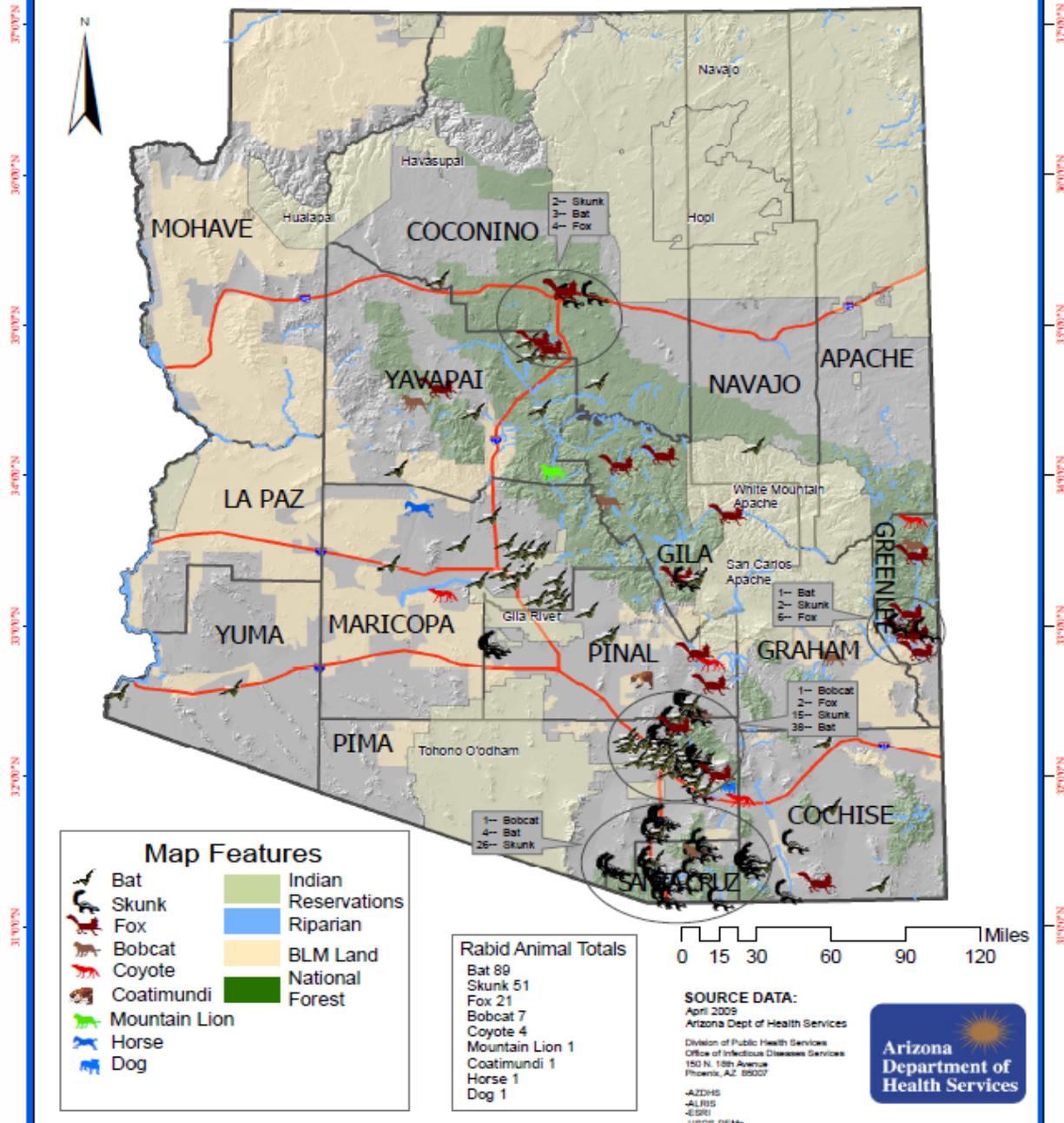
Data is provisional and subject to change.

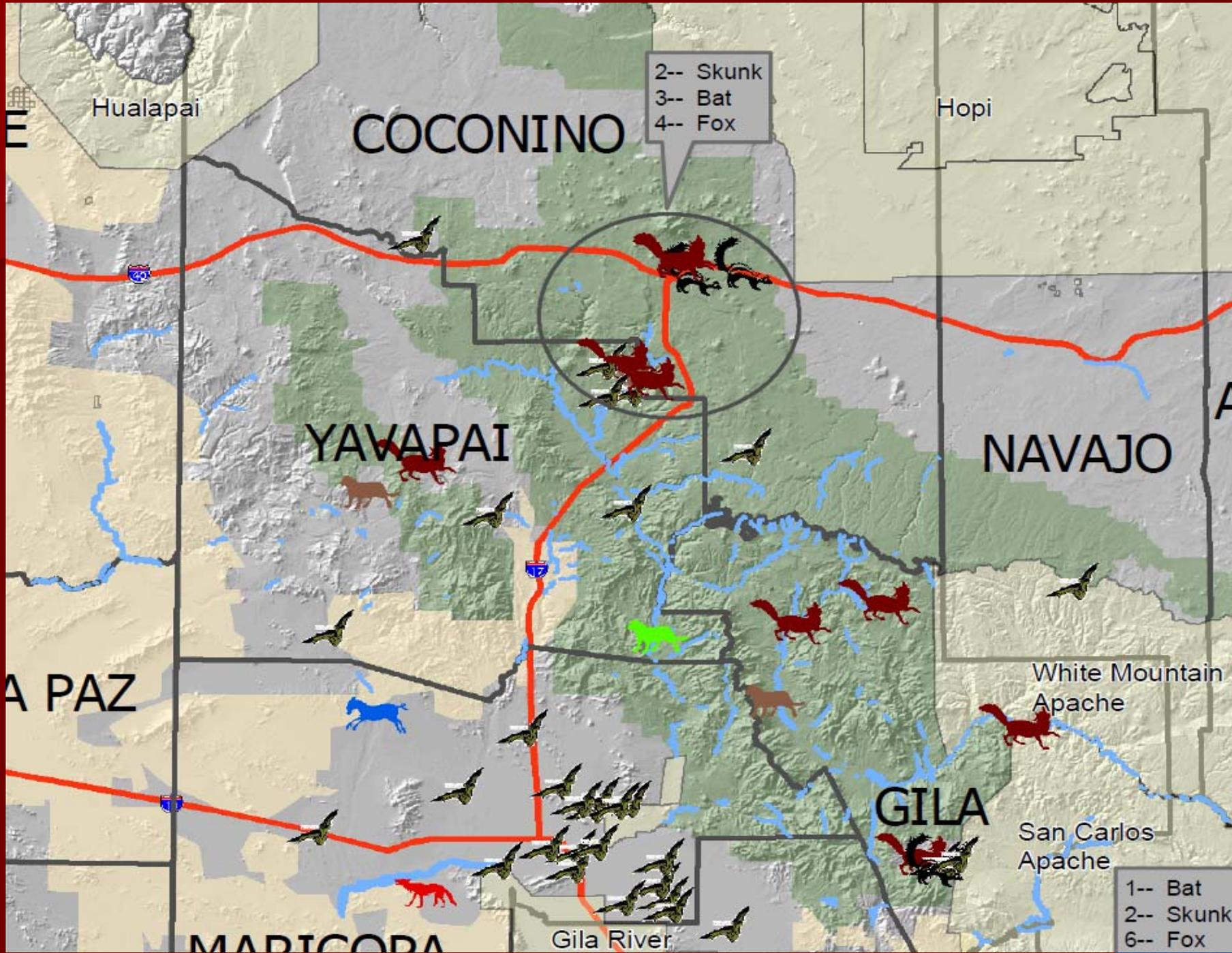


Services



Confirmed Animal Rabies Cases Arizona 2008

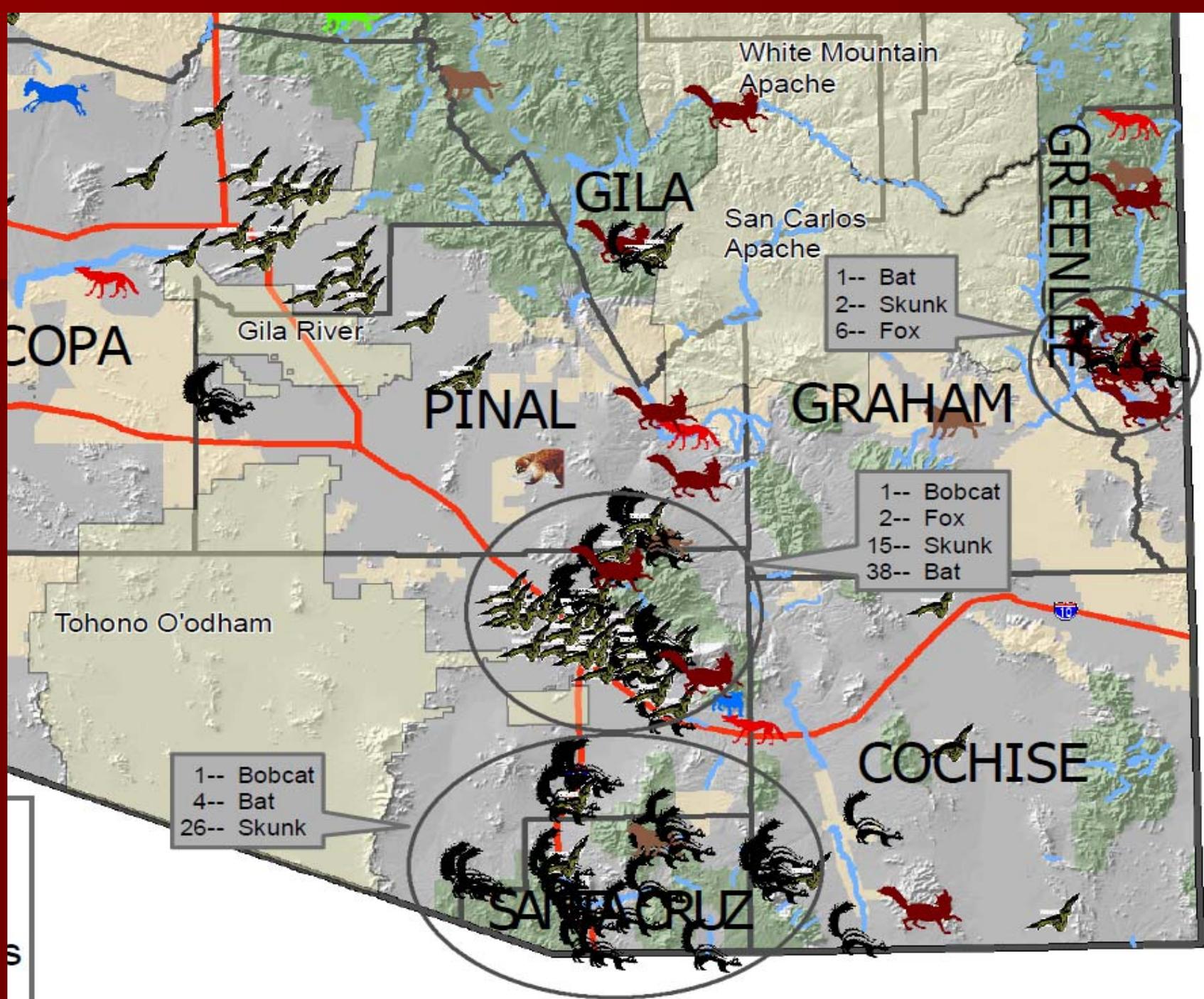




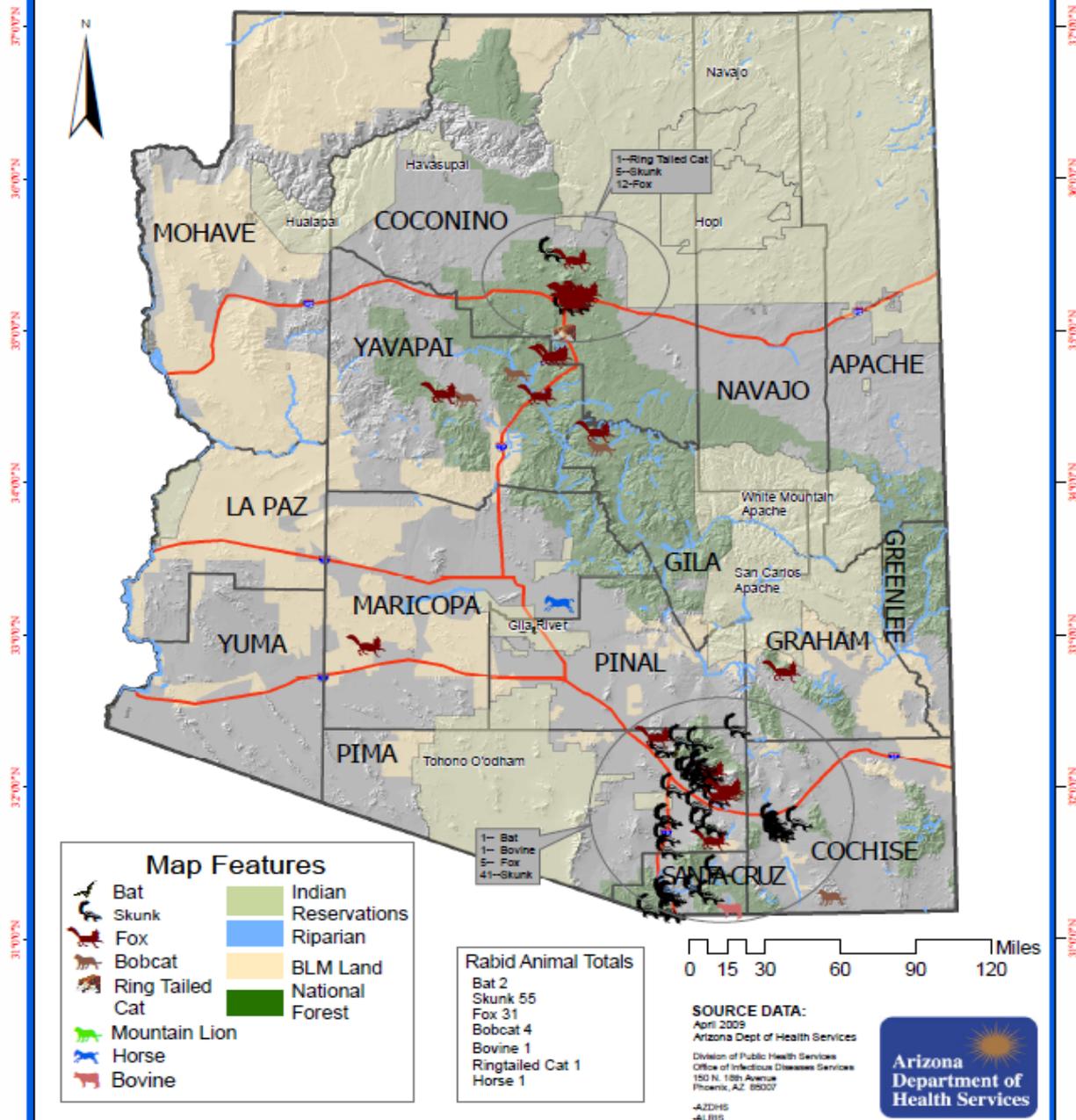
2-- Skunk
3-- Bat
4-- Fox

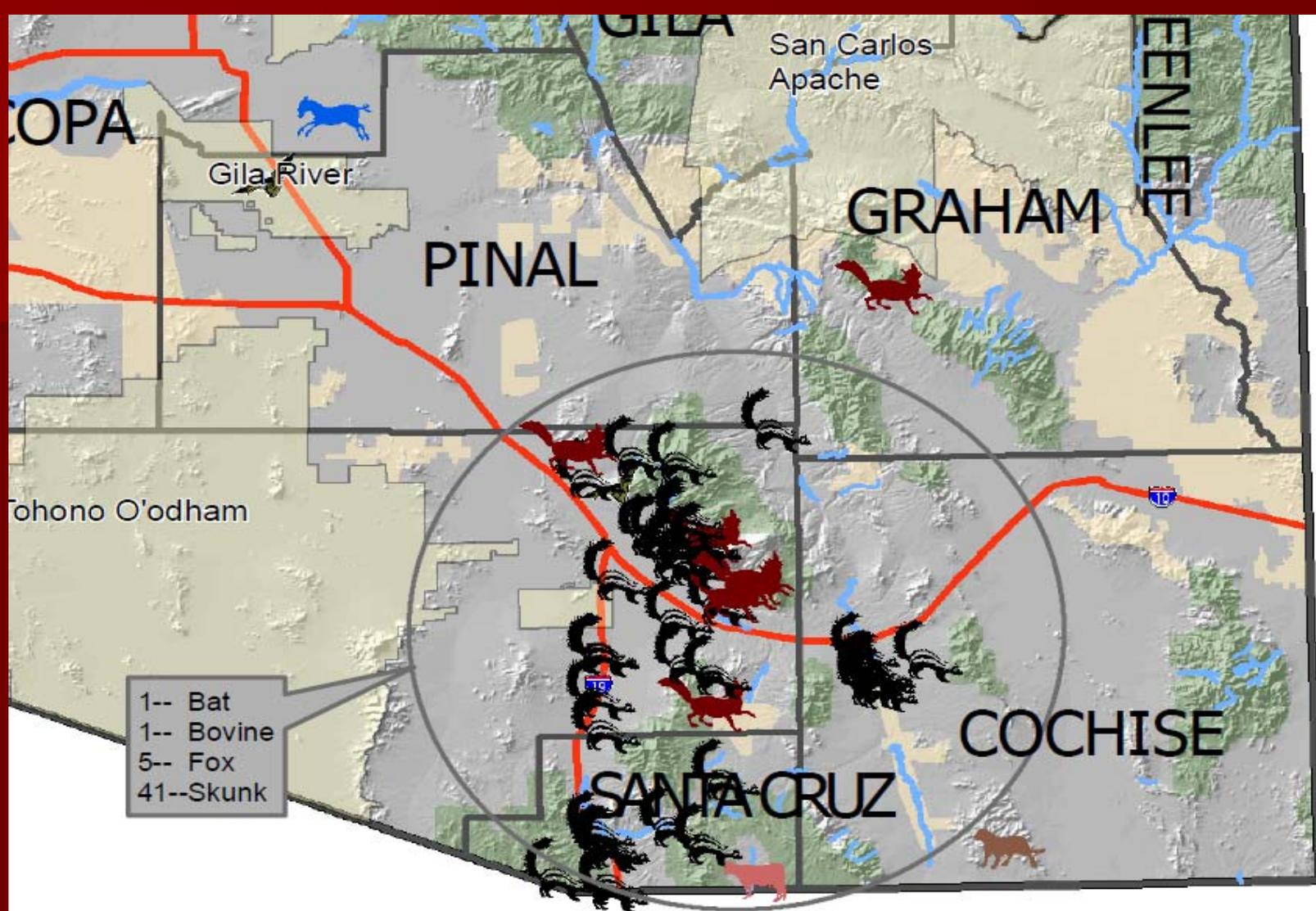
1-- Bat
2-- Skunk
6-- Fox



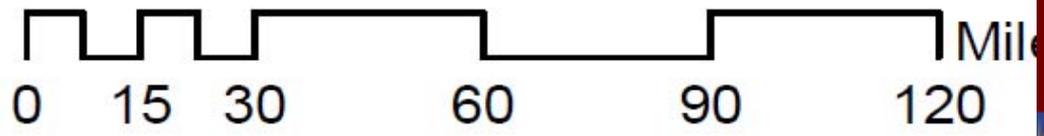


Confirmed Animal Rabies Cases First Quarter 2009





Rabid Animal Totals	
Bat	2
Skunk	55
Fox	31



SOURCE DATA:

Human Rabies Vaccine Limited Supply

From: Health Alert Network (CDC)

Sent: Friday, June 20, 2008 11:40 AM

To: Health Alert Network (CDC)

Subject: CDC Advisory 00276 - Temporary Decrease in Human Rabies Vaccine Supplies

This is an official

CDC Health Advisory

Distributed via Health Alert Network

June 20, 2008, 14:30 EDT (02:30 PM EDT)

CDCHAN-00276-08-06-20-ADV-N

Temporary Decrease in Human Rabies Vaccine Supplies

The Centers for Disease Control and Prevention (CDC) has been notified that Novartis Vaccines, maker of RabAvert (Rabies Vaccine), will temporarily cease to provide their rabies vaccine for both pre- and post-exposure prophylaxis uses to health care providers. This includes physicians, nurse practitioners, hospitals, clinics, etc. A second company, Sanofi Pasteur, produces IMOVAX Rabies (Rabies Vaccine), and will continue to supply vaccine to health care providers for post-exposure prophylaxis (PEP). In certain circumstances, such as an allergic reaction to one company's vaccine product, the other company's vaccine product can be obtained to complete a vaccination series after consultation with state health departments and CDC, on a case-by-case basis. Overall, both manufacturers have limited supplies of rabies vaccine, necessitating the need for judicious use of these products by health care providers. (It is expected that additional RabAvert will be available on the market in July 2008. When that occurs, it is expected that the demand for pre-exposure vaccinations can be fully met with RabAvert.)

Due to temporarily limited supplies, distribution of vaccine for pre-exposure prophylaxis (PreP) will be approved by state and federal public health authorities. Priority will be given for those individuals at greatest rabies exposure risk (e.g., rabies laboratory workers, animal control

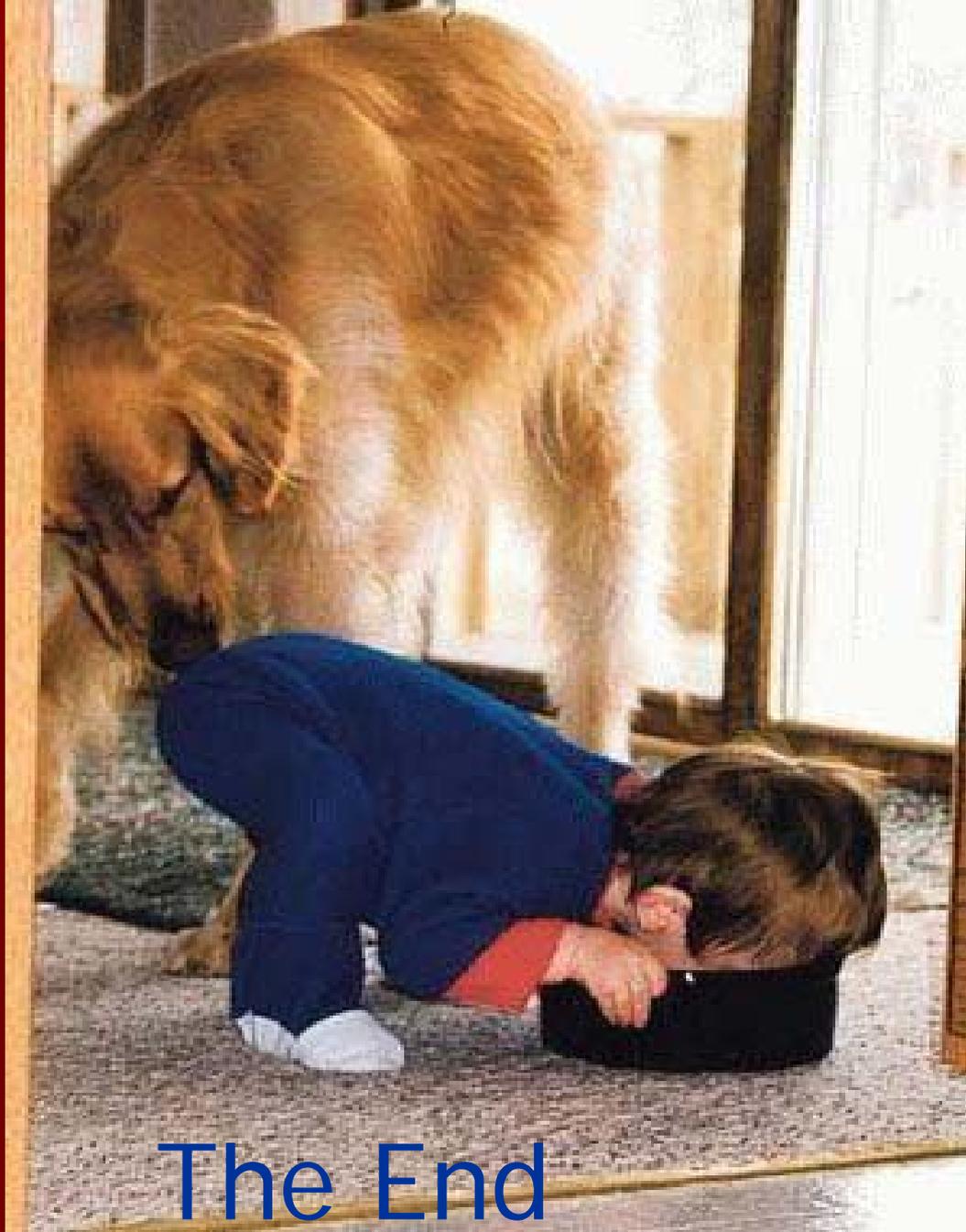
Why interruption in supply?



- June 2007, Sanofi Pasteur began renovating IMOVAX Rabies vaccine production facility in France to maintain compliance with current requirements from FDA & French regulatory body
- Prior to these renovations, Sanofi Pasteur established an inventory based on historical levels of sales and projected market demand.
- The facility is scheduled to be approved & operational by mid-to-late 2009. Until facility is operational, Sanofi Pasteur has a finite amount of IMOVAX Rabies vaccine.

Why was there an interruption in supply?

- After the renovations began, Novartis, the other supplier of rabies vaccine for the United States, was unable to meet projected rabies vaccine supplies.
- Since early 2008, Novartis has been supplying its rabies vaccine, RabAvert, for post-exposure use only. Consequently, Sanofi Pasteur has been supplying nearly all of the market for rabies vaccine. The increase in demand for IMOVAX is outpacing the company's historical levels of supply
- Now- RabAvert available for pre/post exposure prophylaxis
- Password system still in place for ImoVax- post-exposure only; local/state public health officials only provide if PEP warranted



The End

Arizona Department of Health Services

