

USDA APHIS WS Feral Swine Damage Management

<http://www.aphis.usda.gov/ws/ca>



A presentation to the California Fish and
Game Commission

Wildlife Resource Committee

Dennis Orthmeyer - CA State Director

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Services

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USDA APHIS WS Mission

<http://www.aphis.usda.gov/ws/ca>

Provide Federal leadership and expertise to resolve wildlife conflicts to allow people and wildlife to coexist.

WS Wildlife Services

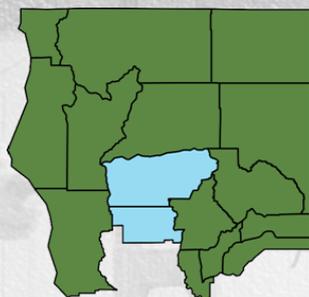
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WS Wildlife Services

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USDA-APHIS-WS-California Program

<http://www.aphis.usda.gov/ws/ca>



North District

Jim Shuler

(530) 336-5623

Sacramento District

Vacant

Central District

Wade Carlson

(209) 579-2891

San Luis District

Eric Covington

(661) 765-2511

South District

John Turman

(619) 561-3752

Sacramento State Office

Dennis Orthmeyer, State Director

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(916) 979-2675



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Topics

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- **USDA APHIS WS National Program**

CA WS Program

Collaboration



Basic Biology

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- **Sows are reproductive at approximately 6-9 months of age.**

In Texas, they say a sow can have 4-8 piglets in a litter and 10 will survive.

- **The number of piglets per litter can vary greatly, ranging from 4 - 13.**

Invasive Species

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**Most Invasive and destructive
mammal in North America**

Agricultural Assassins

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\$2.5 Billion of Agricultural Damage Annually in U.S.

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Ecological Site Assassins

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RECLAMATION/RESTORATION SITE

SWINE, FERAL

\$27,407,775.00

Sacred Burial grounds

Cultural Area

Endangered Plants

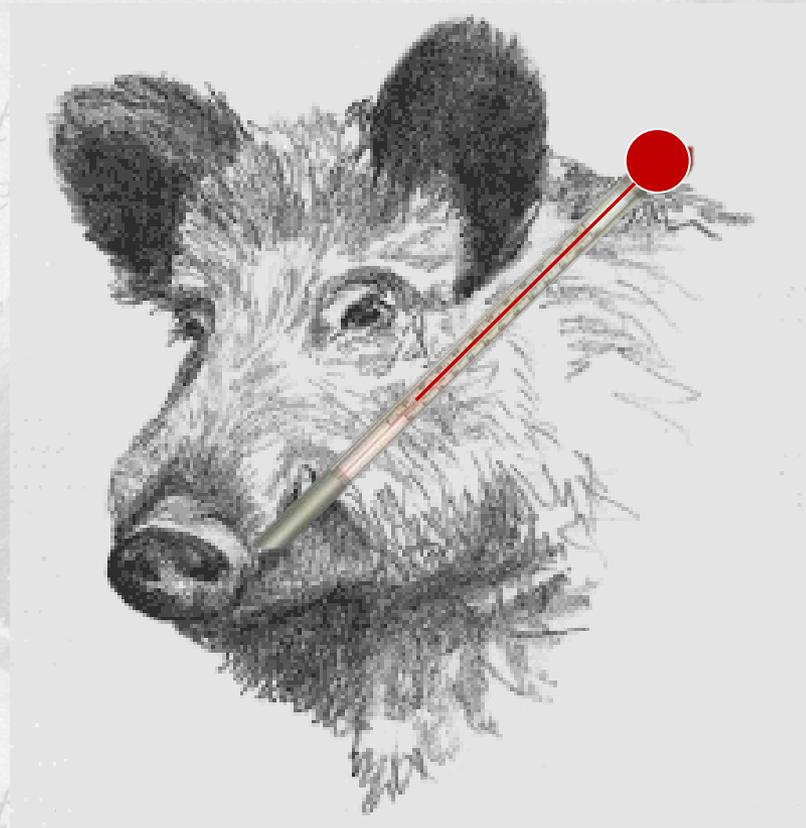


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Zoonotic Disease Threat

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USDA National Wildlife Disease program tests feral swine for up to 25 diseases which can be transmitted to livestock, people, pets and wildlife.



WS Wildlife Services

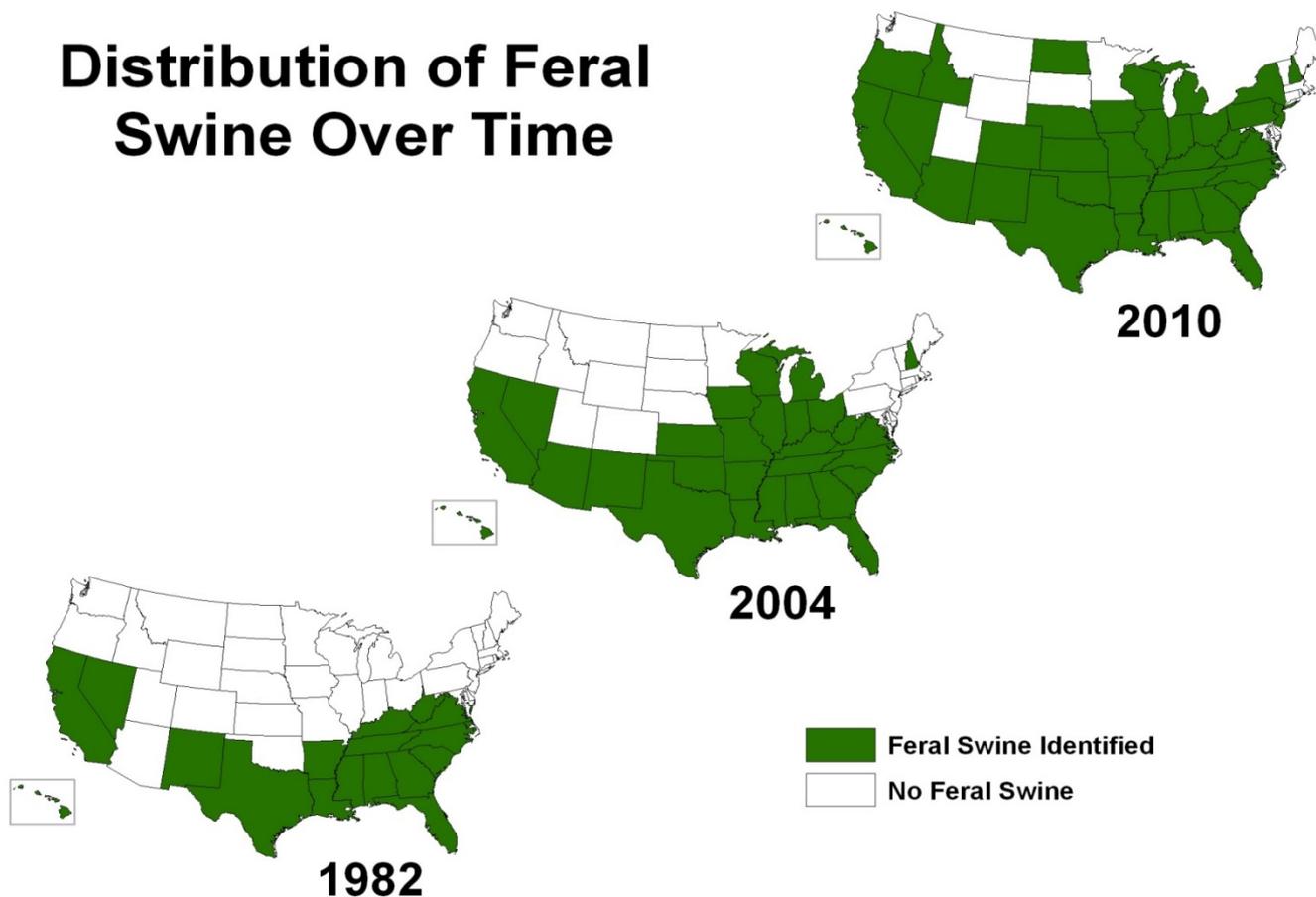
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National Feral Swine Expansion

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Year	Population Estimate
1990	1 million
2007	4 million
2012	5 million

Distribution of Feral Swine Over Time



USDA APHIS National Feral Swine Damage Management Program

<http://www.aphis.usda.gov/ws/ca>



2014 Congress provided \$20M

**Estimated \$1.5 – 2.5B
Ag Damage annually**

**“Feral swine are
able to carry and
transmit up to 30
diseases and 37
different parasites
to livestock, people,
pets and wildlife.**



The National Strategy is to

- **Focus feral swine control efforts on containment (elimination of feral swine from emerging or relatively recent range expansion),**
- **Targeted population reduction,**
- **Mitigate damages and disease risks where feral swine populations are already established.**

Methods – Trapping \$\$\$

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Regulated Pesticides

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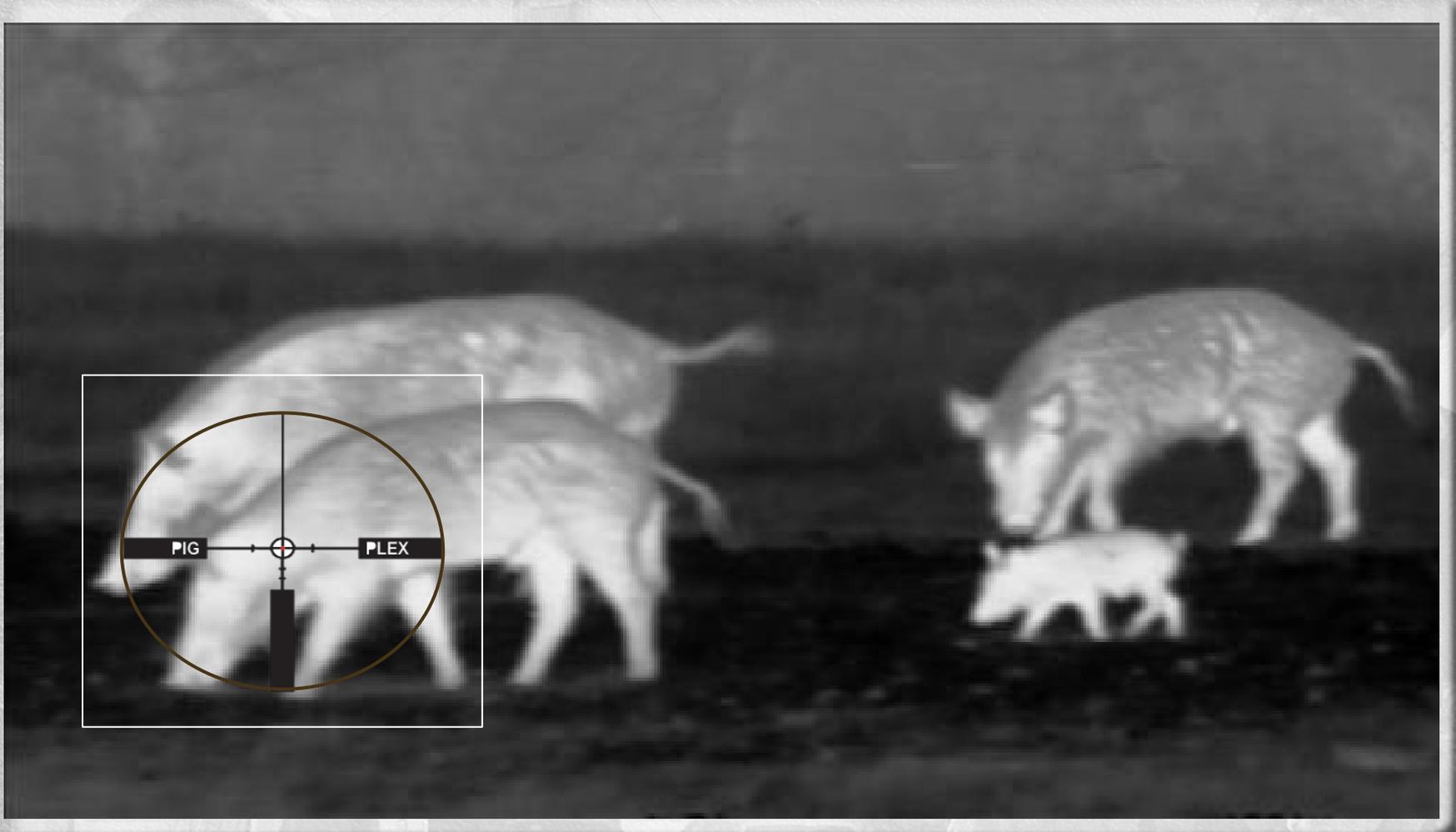


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Day Shooting / Night Vision

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Sometimes

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National Control Efforts

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Game in CA and HI and FL on some wildlife management lands, 4 counties in WV.

Exotic mammal, invasive species

Feral Livestock

Non-game, invasive species

Nongame /Nuisance

Stray livestock

Wild animal/ nongame animal

Exotic Livestock

Species Deemed Destructive/Nuisance

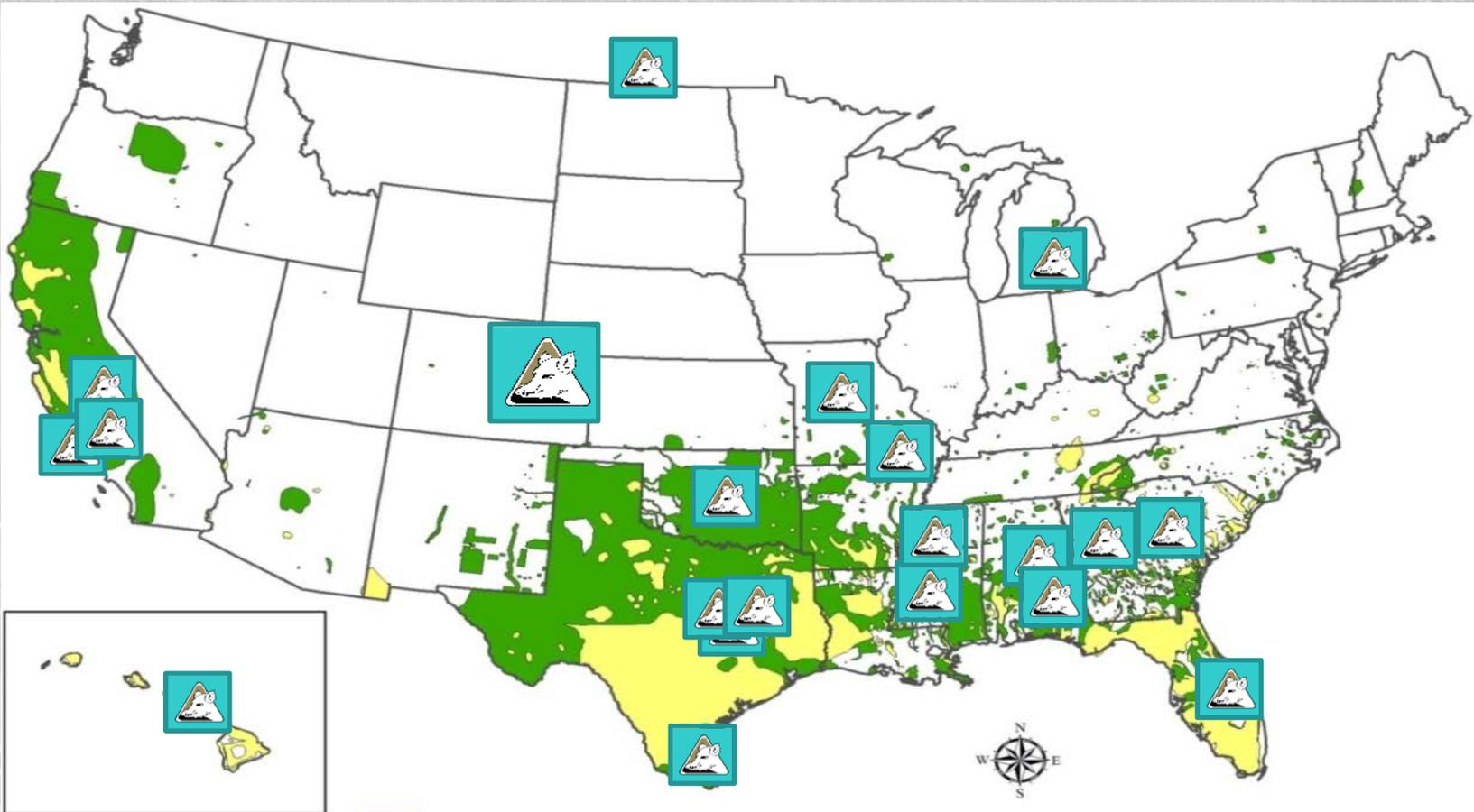
Unclassified

Invasive species and a Harmful Wild Animal

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Collaborative Feral Swine Research

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National Collaborative Feral Swine Research

<http://www.aphis.usda.gov/ws/ca>

- **Estimation of Economic Damages to Agriculture**
 - **Quantifying Movements and Crop Damage**
 - **Impact on Quail and Wild Turkeys**
 - **Population Density and Invasion Risk**
 - **Toxicant Development (Sodium Nitrite)**

Feral Swine Toxicants and Safe Delivery Systems

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PM75 RAPIDFIRE PRO



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Feral Swine/Wild Pig Depredations

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Deer fawns

Ducks

Doves

Coots

Cranes

Rails

Turkeys

Pheasants

Prairie chickens

Wood cock

Lamb

Calves

Goats

Sheep

**In Florida feral hogs
destroy up to 80% of
endangered turtle nests**

In California

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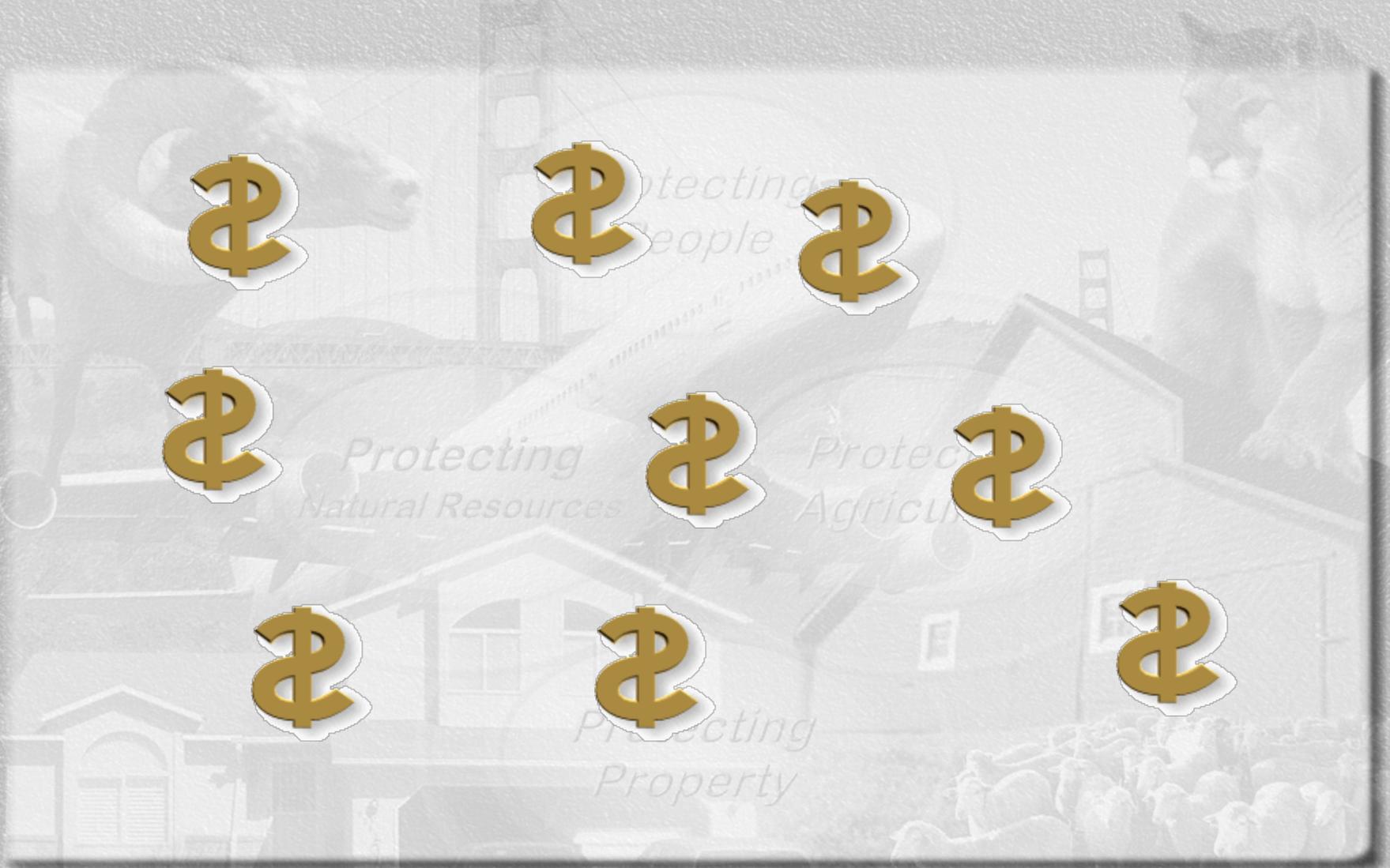


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Economics

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Regulatory Agencies

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- **CA Department of Fish and Wildlife**
- **CA Department of Food and Ag**
- **USDA Food and Safety Inspection Service**

Game Mammal

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Highly Successful Hunted Game Mammal

Excellent Species For New Hunter Recruitment

84% land in high density area is private land

94% wild pigs taken on private land

Agricultural and Ecological Assassins

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**72 Rare or T&E Plants are within
high impact pig range in CA**

Bio Terroristic Petrie Dish

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Diseases of Feral Swine:

African Swine Fever

Classical Swine Fever (Hog Cholera)

Foot & Mouth Disease

E.coli (205 illnesses and 3 deaths)

Hepatitis E

Plague

Psuedorabies (PRV)

Salmonella

Swine Influenza Virus

Swine Brucellosis

Toxoplasmosis

Trichinella

Tularemia



Expansion of Feral Swine in California

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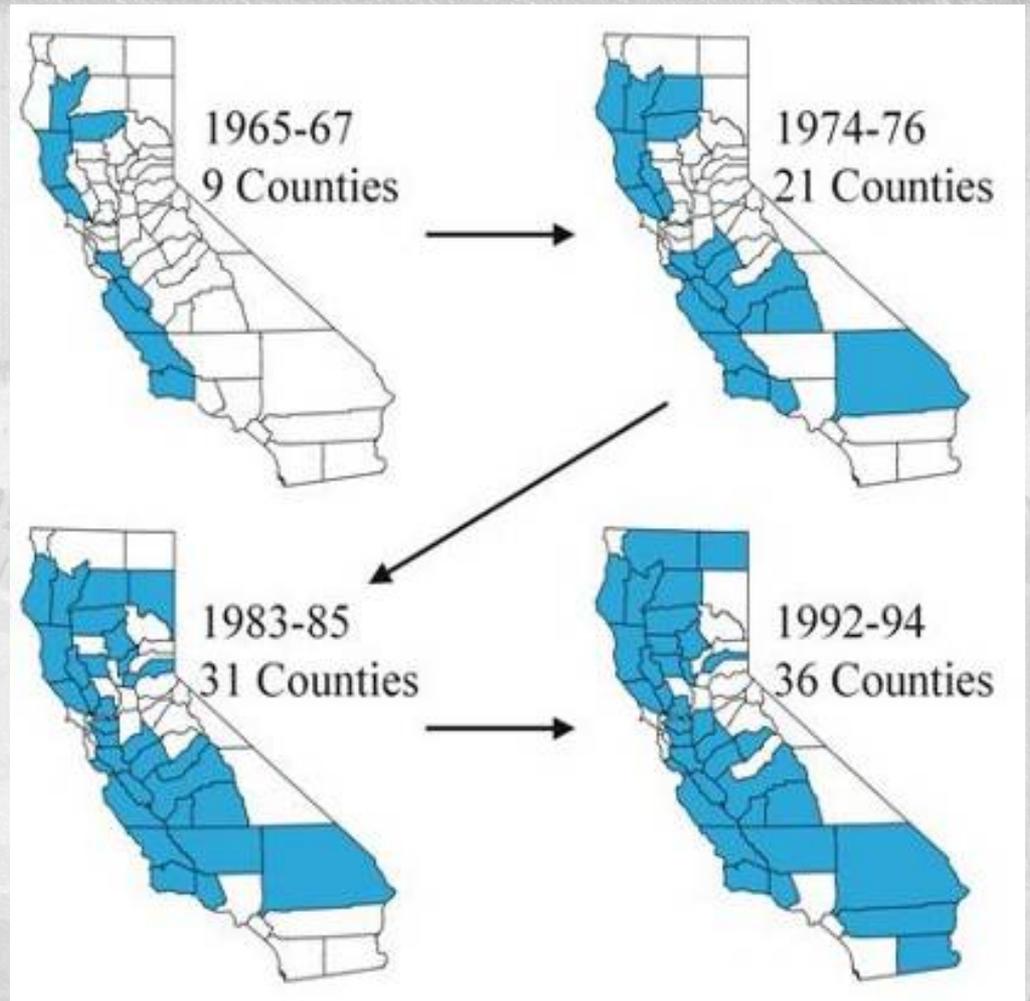
1769: Domestic pig escape from Spanish missions

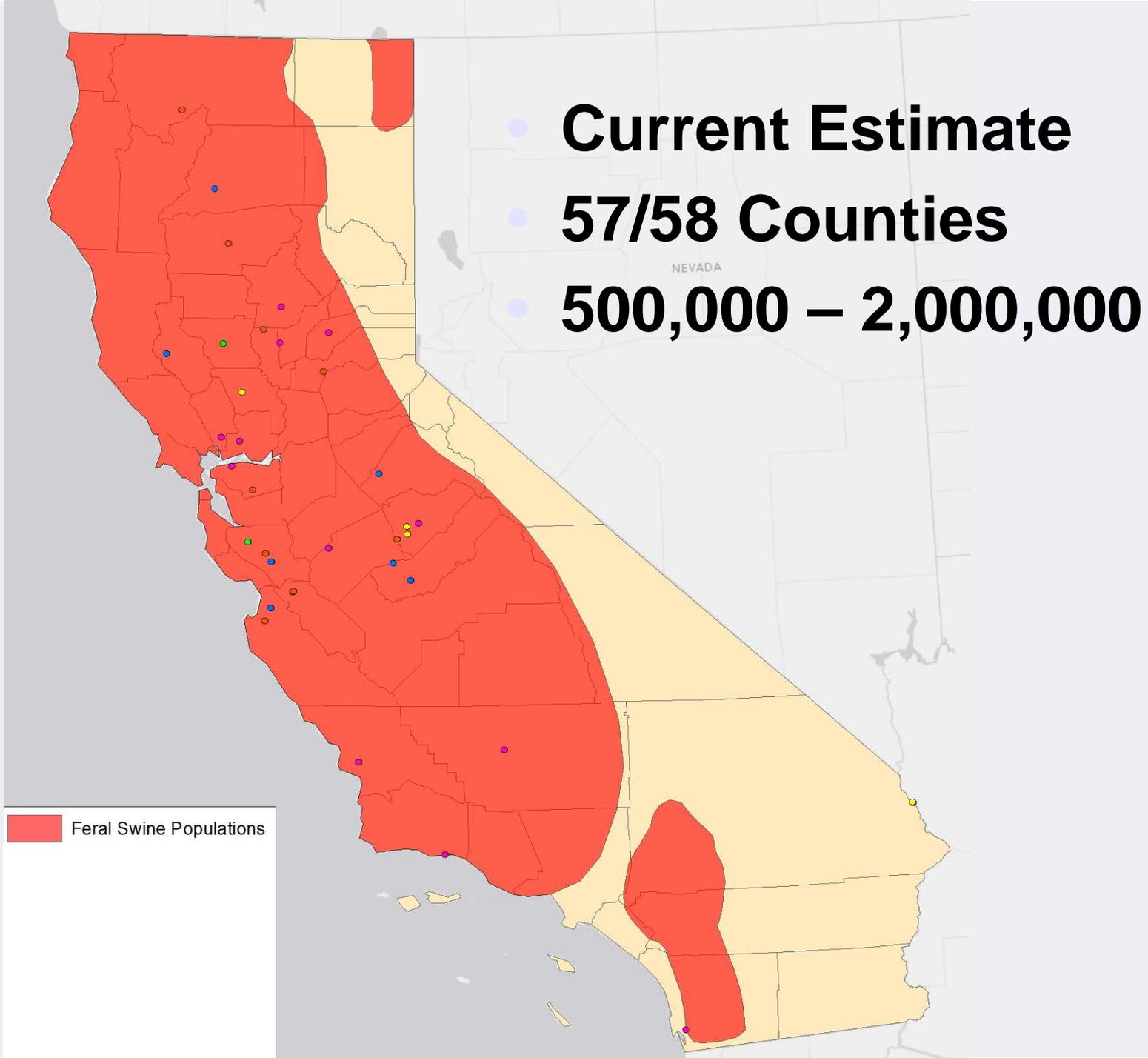
1926: Eurasian wild boar type wild pigs released

1957: Wild pigs classified as game mammals

1992: Tags required to take wild pigs

1996: Estimated population: 133,000 individuals





California Wild Pigs

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1769: Domestic pig escape from Spanish missions

1926: Eurasian wild boar type wild pigs released

1957: Wild pigs classified as game mammals

1992: Tags required to take wild pigs

2011: Estimated population: 400K – 2 Million

- **Depredation removals - Average 900**
- **Recorded Damage - 2M annually**
- **Herd Health – Disease Sampling 250/year**
- **San Diego County elimination project**
 - (16 member Intra-Agency project)
- **Tejon Research project**
- **Vandenberg AFB Damage Assessment**

San Diego County Elimination Project

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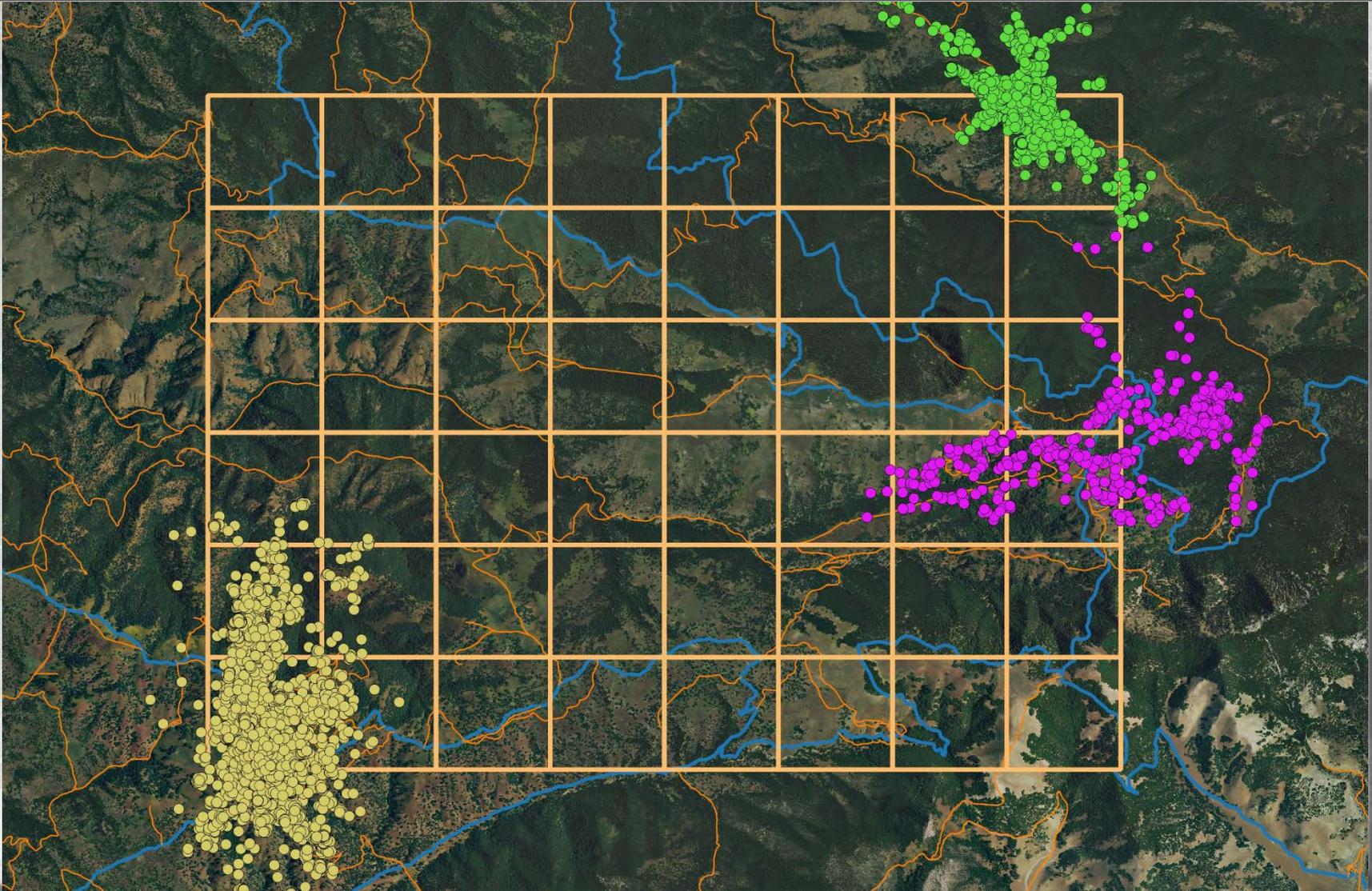
16 member inter-agency governmental group

BARONA BAND OF MISSION INDIANS, VIE-JAS BAND OF KUMEYAAY INDIANS, BUREAU OF LAND MANAGEMENT, U.S. FISH AND WILDLIFE SERVICE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, CALIFORNIA DEPARTMENT OF PARKS, COUNTY OF SAN DIEGO, CITY OF SAN DIEGO, VISTA IRRIGATION DISTRICT, HELIX WATER DISTRICT, SWEETWATER AUTHORITY, USDA FOREST SERVICE, CLEVELAND NATIONAL FOREST, BACK COUNTY LAND TRUST, SAN DIEGO NATURAL HISTORY MUSEUM, THE NATURE CONSERVANCY

The value of agriculture produced in San Diego County is estimated at \$1.8 Billion
There are over 200 threatened and endangered species in San Diego County
50 feral swine removed
21,000 person-hours,
2,725 trap nights,
73,458 camera nights,
56 dog hours
325 trail camera locations
and currently has 125-150 active cameras

Tejon Ranch Research

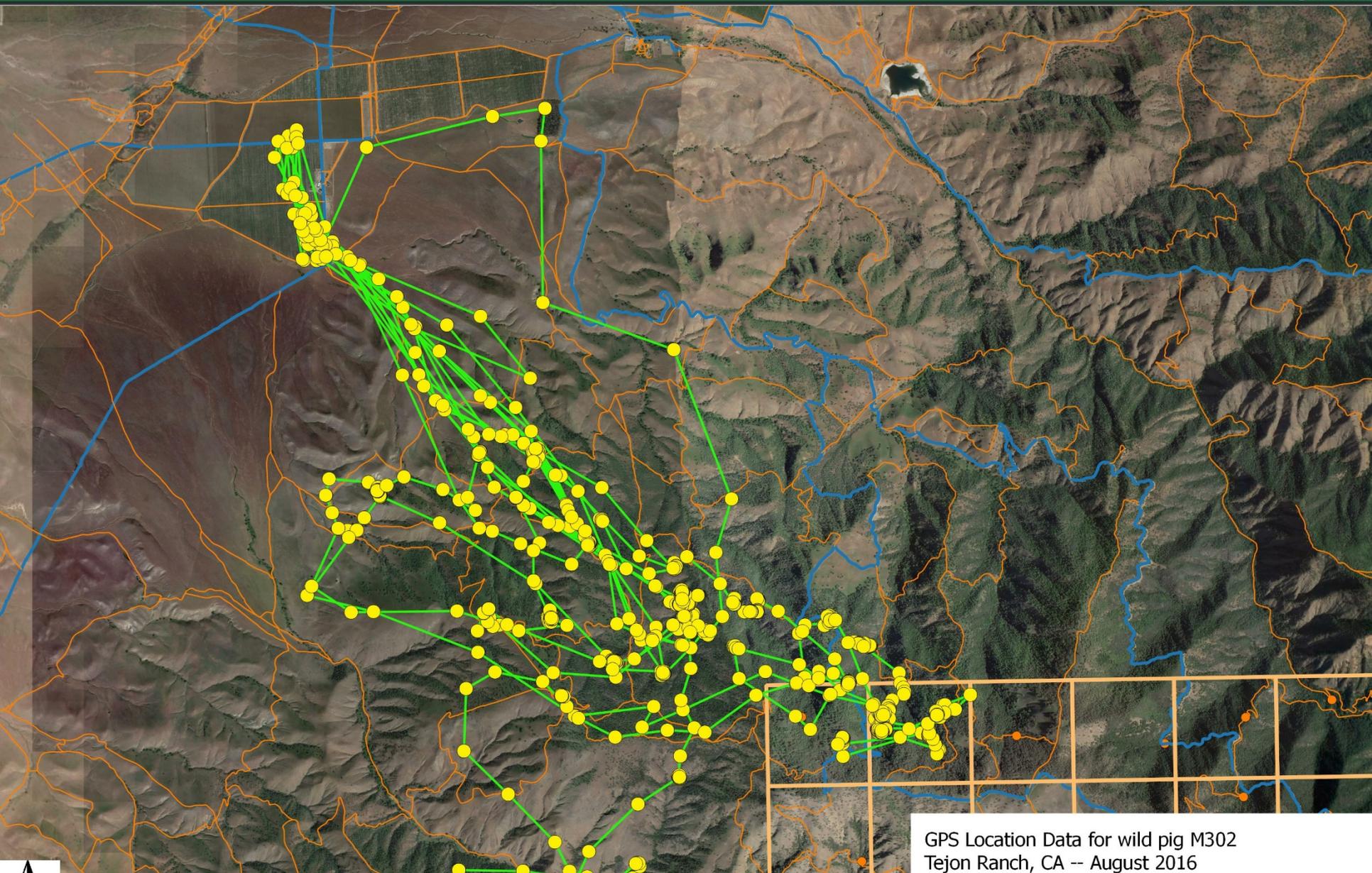
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Agricultural Assassins

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GPS Location Data for wild pig M302
Tejon Ranch, CA -- August 2016

Informal Wild Pig Working Group

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- **Currently**

- **USDA WS, CDFW, and Vet Services, and CDFA**

- **We will Expand group to Federal and State and Private land managers.**

Research Directions

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- **Agricultural damage Assessment**
- **Ecological damage and recovery**
- **Depredation on livestock and wildlife**
- **Herd health – potential impact on humans and wildlife/livestock**
- **Wild pig /Domestic pig interactions**

Principals of Control Mgt.

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- 1. Access**
- 2. Refugia**
- 3. Pressure**
- 4. Time**
- 5. Communication**

Wild Pigs Solutions

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- **Focused controlled?**
 - **Ecological Sensitive Areas**
 - **Agricultural impacted**
 - **Hunting – No population impact**
 - **Eradicate Where and When possible**
 - **Monitor Herd Health**

Wild Pigs / Feral Swine

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**I am an ecological,
agricultural and
wildlife assassin, a
bioterroristic petri
dish, and game
mammal that tastes
really good.**

Let's Collaborate

W Wildlife
Services

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