

New World Screwworm

Cochliomyia hominivorax

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What is New World Screwworm (NWS)?

- Scientific Name: *Cochliomyia hominivorax* ("man-eater") – historically called 'primary' screwworm
 - Now officially called New World Screwworm (NWS)
- It is NOT a typical blowfly larvae. It is an obligate parasite.
 - The larvae feed only on the living flesh of **all warm-blooded animals.**
- Other flies (like the 'secondary' screwworm) feed on dead (necrotic) tissue. NWS creates the wound.
- **An untreated infestation can be fatal in 7-14 days.**

The Larva: What Makes it a "Screwworm"

The name comes from its behavior and appearance.

- Behavior: Larvae burrow head-down into living tissue, perpendicular to the skin, like a screw.
- Appearance: The larva has rings of spines that anchor it, making it difficult to remove.

They feed in large groups (200+), mechanically destroying tissue and enlarging the wound, which attracts more flies.

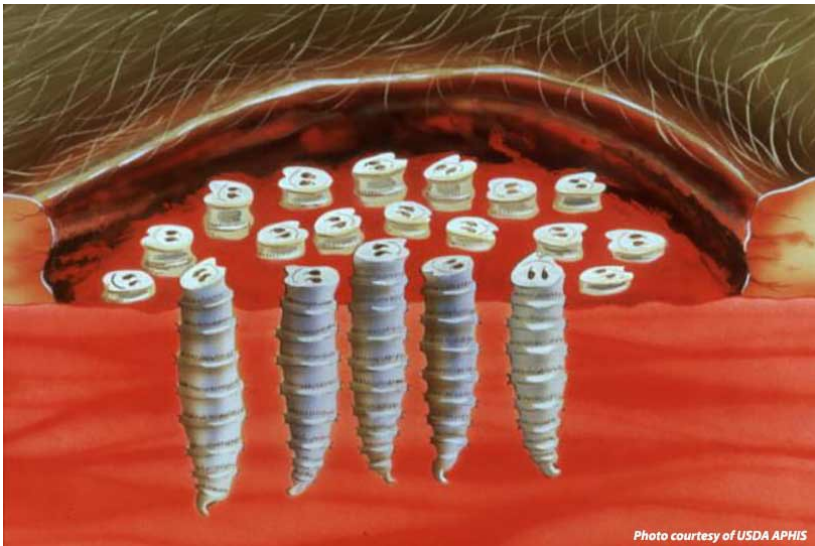
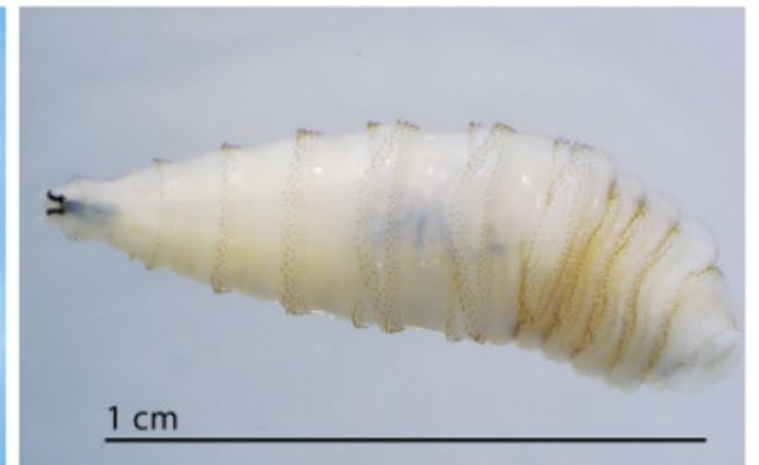


Photo courtesy of USDA APHIS



Gross appearance of *C. hominivorax* third-instar larvae; Lateral view (left image, top), dorsal view (left image, bottom), and ventral view showing mandibles (right image).

The Threat: High-Risk Wounds

- NWS is attracted to *any* break in the skin. This includes:
- **Wounds or Natural Openings:**
 - Newborn animals - navels (a primary target)
 - Dams of newborns
 - Wounds – scratches, punctures, abrasions
 - Tick bites or skin diseases
- **Other High-Risk Areas:**
 - Eyes – if watering, irritated, injured/cancer
 - Ears – tagging, parasites, injuries
 - Nose, nasal cavity, sinuses
 - Mouth
 - Genitalia – sheath, vulva



Serious picture alert warning

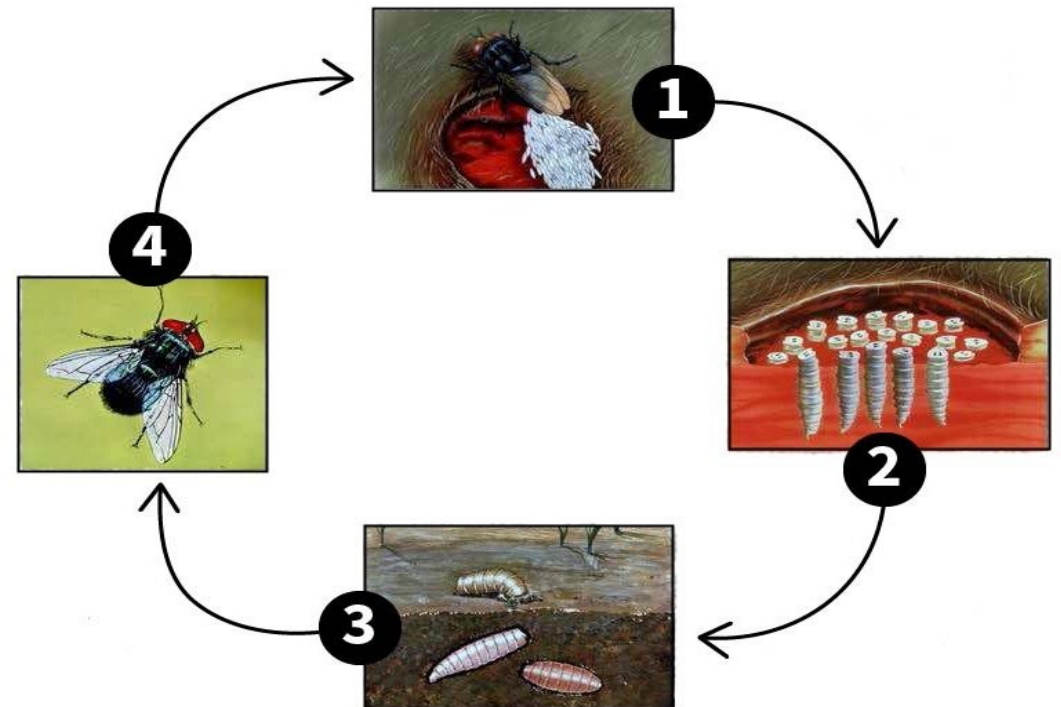




NWS Life Cycle

1. Screwworm infestations begin when a female fly lays eggs on a wound or orifice (~200-300 / batch)
2. One female can lay up to 3,000 eggs in her lifespan in multiple batches (10-30 d)
 - Eggs hatch within 12-24 hours
3. After 5-7 days of feeding (3 instars), larvae drop to the ground, burrow into the soil, and pupate
4. Emerge 1-7 wk later as adult
 - Temperature dependent
5. Flies can travel an average of 1-2 miles/day
 - Maximum distance is 10 miles/day

Under optimal conditions
full life cycle in ~24d



NWS Useful Ecology

- Flies not very active under 65 or over 90 degrees F
 - Won't oviposit under 65 degrees F
 - Temperatures over 105 degrees F are potentially lethal
 - Sudden changes in temperature kill flies
 - Don't like hot dry weather or extreme cold
 - Overwintering---
 - Don't like low rainfall years
 - Don't like temperatures under 53 degrees
- Most important of all:
 - Female only mates once

NWS – Sterile Insect Technique

- *Female NWS flies only mate once in their lifetime*
- NWS pupae can be irradiated to make them sterile
- Sterile males mate with wild females and cause her to lay infertile eggs
- Over time, this results in decreased population and helps with **eradication**



Trapping for Surveillance



Passive vs Active Trapping

- Needle in a haystack
- Advantage to identifying live flies
- Possible to determine sterility when fresh

Trapping for Surveillance

- Reasons to do fly surveillance
 - Determine presence and density of wild flies
 - Monitor distribution of sterile flies and absence of sterile flies
 - Monitor 10:1 ratio of sterile to fertile flies



From the net to hand

- NWS tend to try to sneak out the side of the net and will often stay on the liver after everyone else goes into the net
- Hardest part! Learning how to find that one screwworm among hundreds of blowflies in your net
- Bullet-shaped flies with smooth quick gait

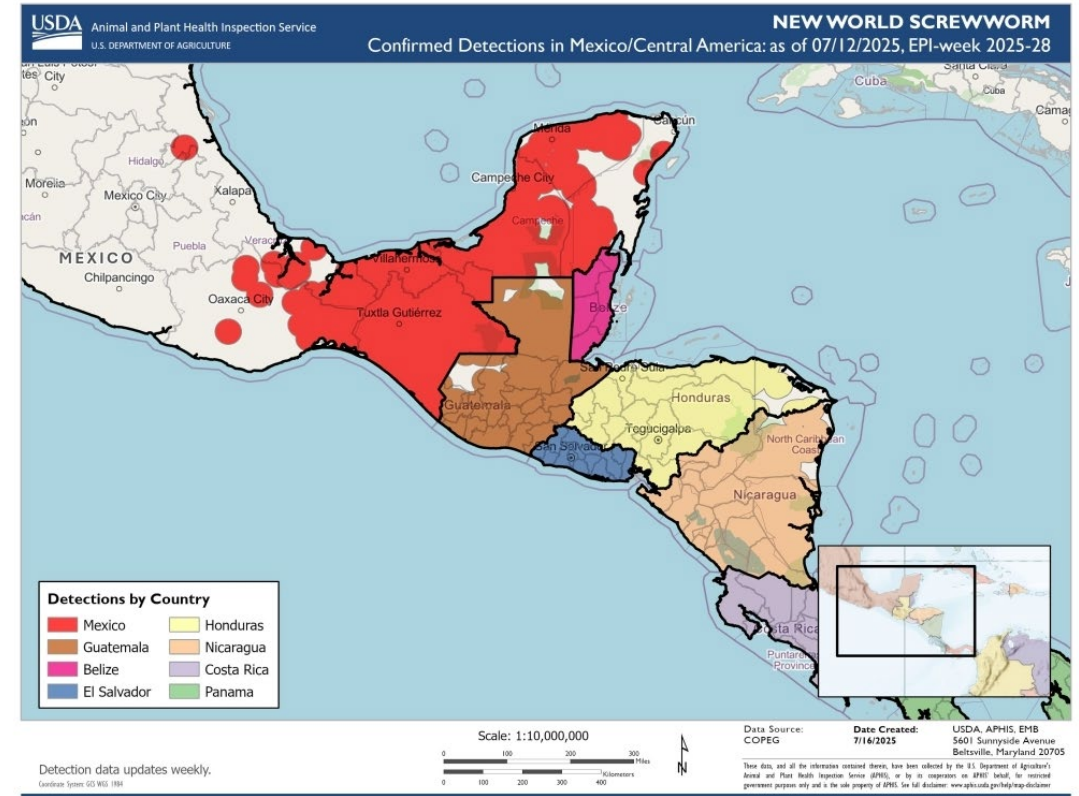


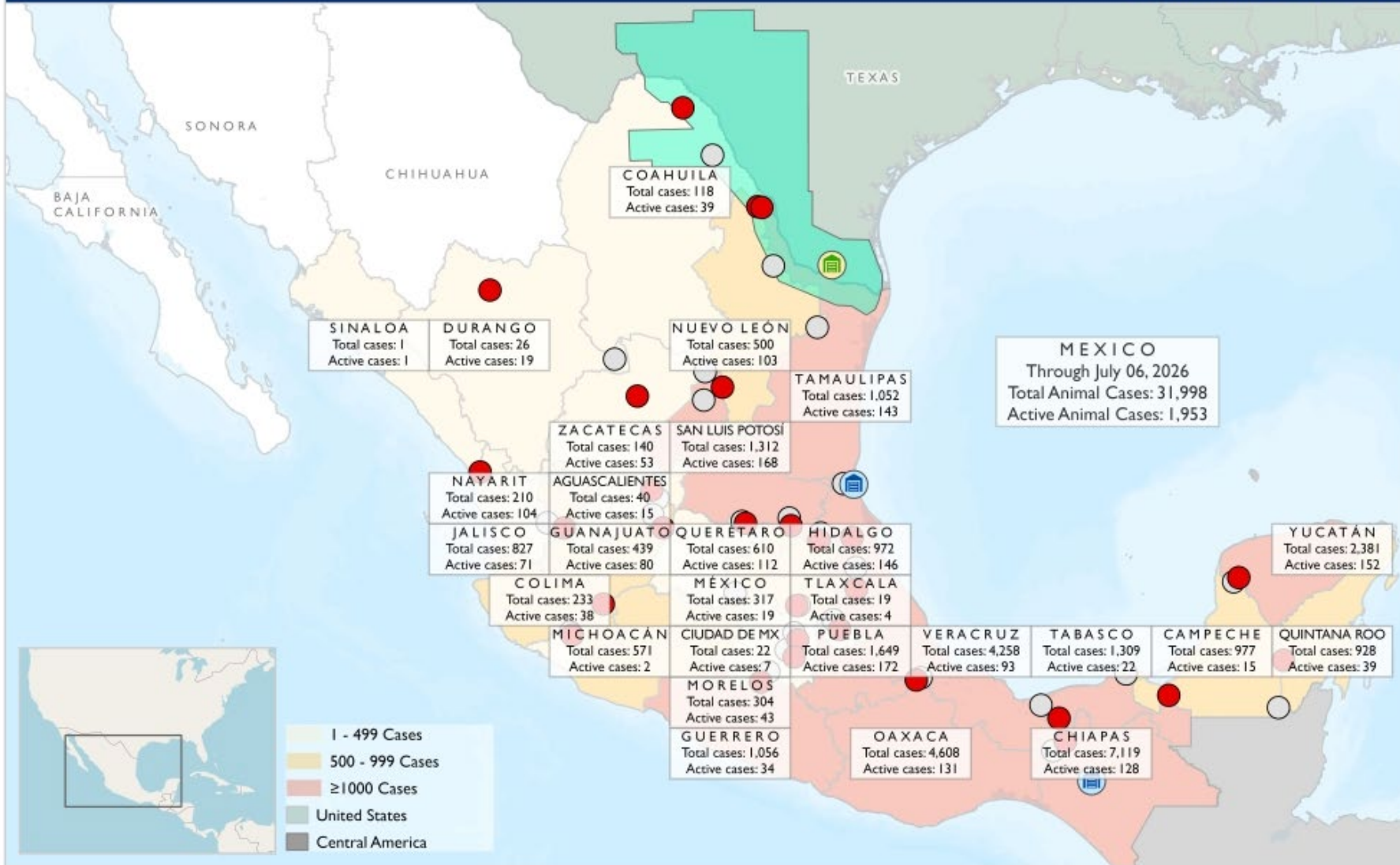
History of screwworm distribution and eradication



Resurgence

- February 2023 – Panama
 - reported an increase in cases
- July 2023 – Panama, Costa Rica
- March 2024 – Nicaragua
- September 2024 – Honduras
- October 2024 – Guatemala
- November 2024 – Mexico
- December 2024 – El Salvador and Belize
- June 2026 – United States





MX State Case Closest to U.S. Border

- Active
- Inactive

🏠 SI Dispersal Centers

🏢 Moore Air Base

🟩 SI Dispersal Polygon

Data Source:
SENASICA

Date Created:
7/7/2026

USDA APHIS
2150 Centre Ave
Fort Collins, Co 80526

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Informe de casos activos de GBG en México al 07/07/2026

(Semana epidemiológica No.27 de 2026).



Agricultura
Secretaría de Agricultura y Desarrollo Rural



2,090

Casos activos

Casos activos por especie:*

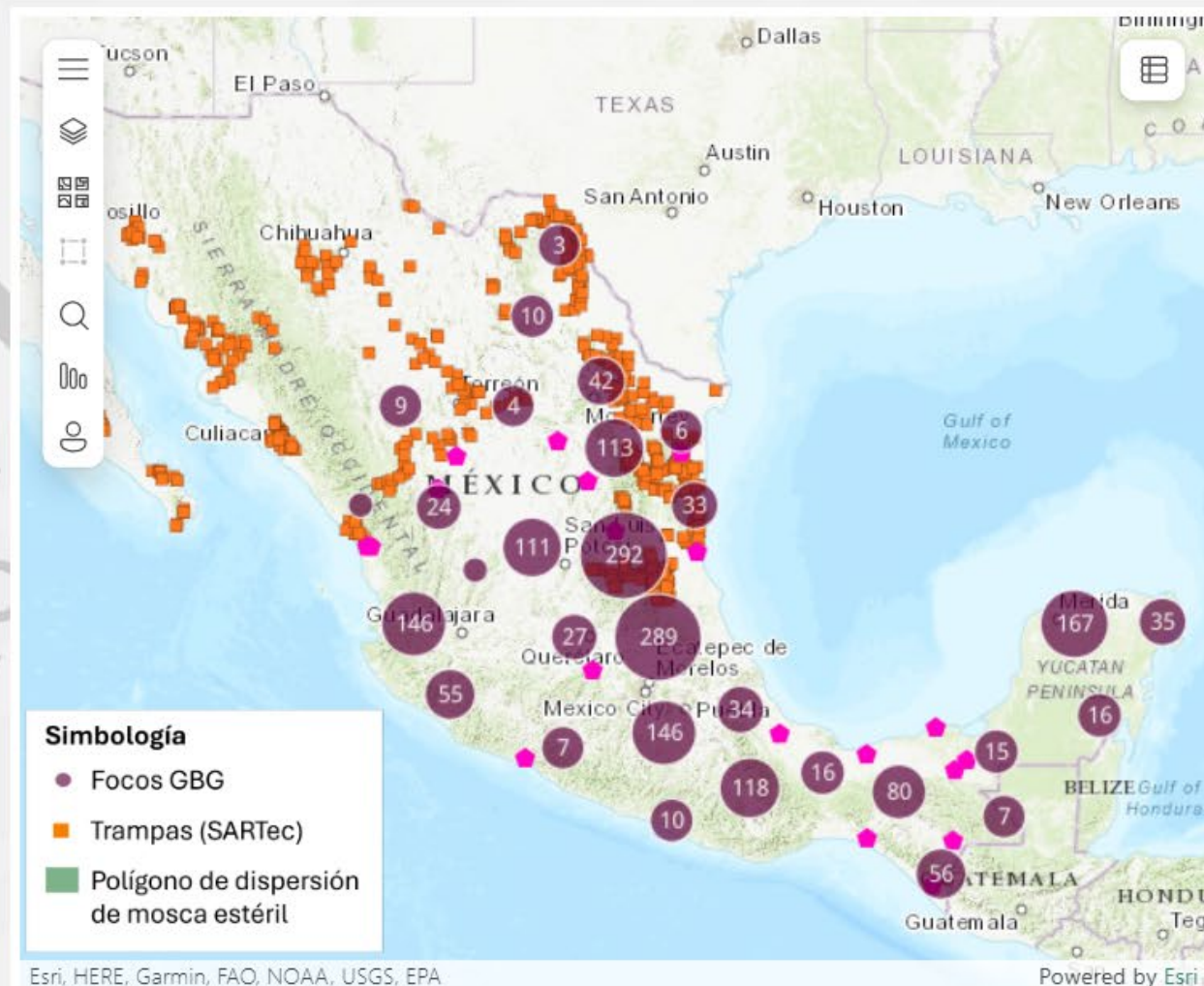


Casos activos por entidad y municipio:

ENTIDAD/MUNICIPIO	TOTAL DE CASOS
PUEBLA	182
SAN LUIS POTOSI	176
YUCATAN	171
HIDALGO	160
TAMAULIPAS	158
CHIAPAS	132
OAXACA	130
NUEVO LEON	117
QUERETARO	115
NAYARIT	112
VERACRUZ	105
GUANAJUATO	75
JALISCO	75
Total	2,090

Casos activos

Casos acumulados



*A partir del 28 de mayo de 2026 y en observancia de las disposiciones normativas, la consulta de los datos sobre casos en humanos se remite formalmente al Boletín Epidemiológico emitido por la Secretaría de Salud. Cabe mencionar que, el sistema conserva los casos acumulados previamente registrados.

[Consultar aquí](#)



New World Screwworm Confirmed Detections

[Download Data](#)

As of Tuesday, July 7, 2026, last reported animal detection July 3, 2026
Data updated daily at 6PM (ET)

Select Time Period

Outbreak Situation All Time

Total Animal Cases

32

Domestic Cases

3218 Active
14 Inactive

Wildlife & Feral Cases

00 Active
0 Inactive

Fly Trap Detections

0

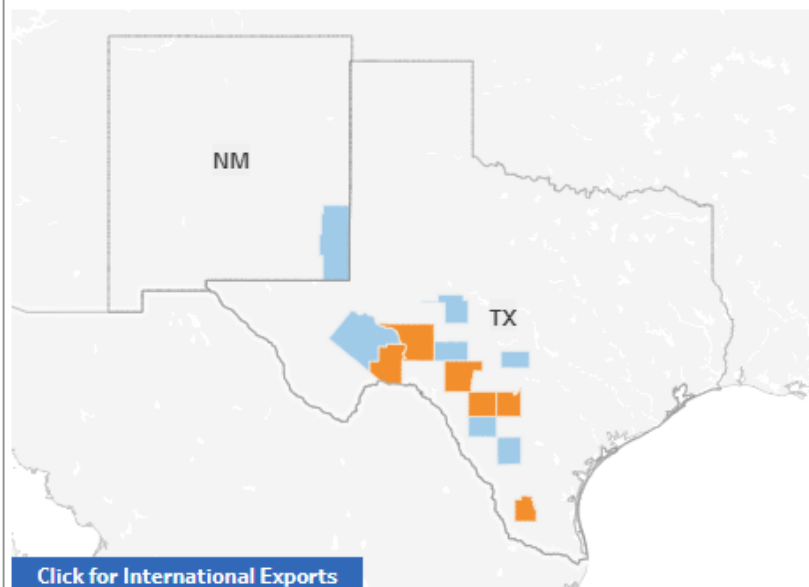
Note: Only wild flies are reported. A detection means at least one wild fly was found in trap.

Map of Counties with Detections All Time

Selected Type

County Status

Active Inactive Fly Trap Detection

[Click for International Exports](#)

Cases by Month

Bars reflect most recent 4 months

Active Cases

Inactive Cases

Fly Trap Detections



Table of Cases

State

Animal Type

Animal Species

Status

The first reported case of New World Screwworm in the United States occurred June 3, 2026. Since that date, the United States has recorded 32 case(s) in 2 states, 32 in domestic animals and 0 in wildlife.

Confirmed Date	State	County	Case Type	Animal Type	Species	Status
03-Jul-2026	Texas	Crockett	Domestic	Domestic	Sheep	Active
30-Jun-2026	Texas	Crockett	Domestic	Domestic	Sheep	Active
					Sheep	Active
29-Jun-2026	Texas	Pecos	Domestic	Domestic	Dog	Inactive
		Uvalde	Domestic	Domestic	Cattle	Active
27-Jun-2026	Texas	Crockett	Domestic	Domestic	Cattle	Active
26-Jun-2026	Texas	Jim Hogg	Domestic	Domestic	Cattle	Active

What Triggers a Zone?

- Detection
 - Larvae in domestic animals with no history of movement
 - Larvae in wildlife
 - Wild fly

The Plan in New Mexico

Upon confirmation of NWS in NM:

- Establish Infested Zone around infested premises
 - Minimum 20km (~12.4mi) radius circle or polygon
 - Sterile fly dispersal, +/- surveillance trapping
 - Movement controls within IZ for livestock
 - Depends on reason for movement (feeding, slaughter, etc.)
 - Potential for mandatory treatment for animals on an infested premises (or within 20km)
- Establish Adjacent Surveillance Zone
 - 20 km (~12.4mi) zone outside of the Infested Zone
 - Area trapping and surveillance, +/- sterile fly dispersal
 - No movement controls, but enhanced inspection recommended
- Establish Fly Surveillance Area
 - Up to 200 km (~124mi) around the infested premises
 - Area trapping and surveillance
 - No movement controls



NM NWS Website: screwwormNM.org

Find address or place

New World Screwworm Zone Search

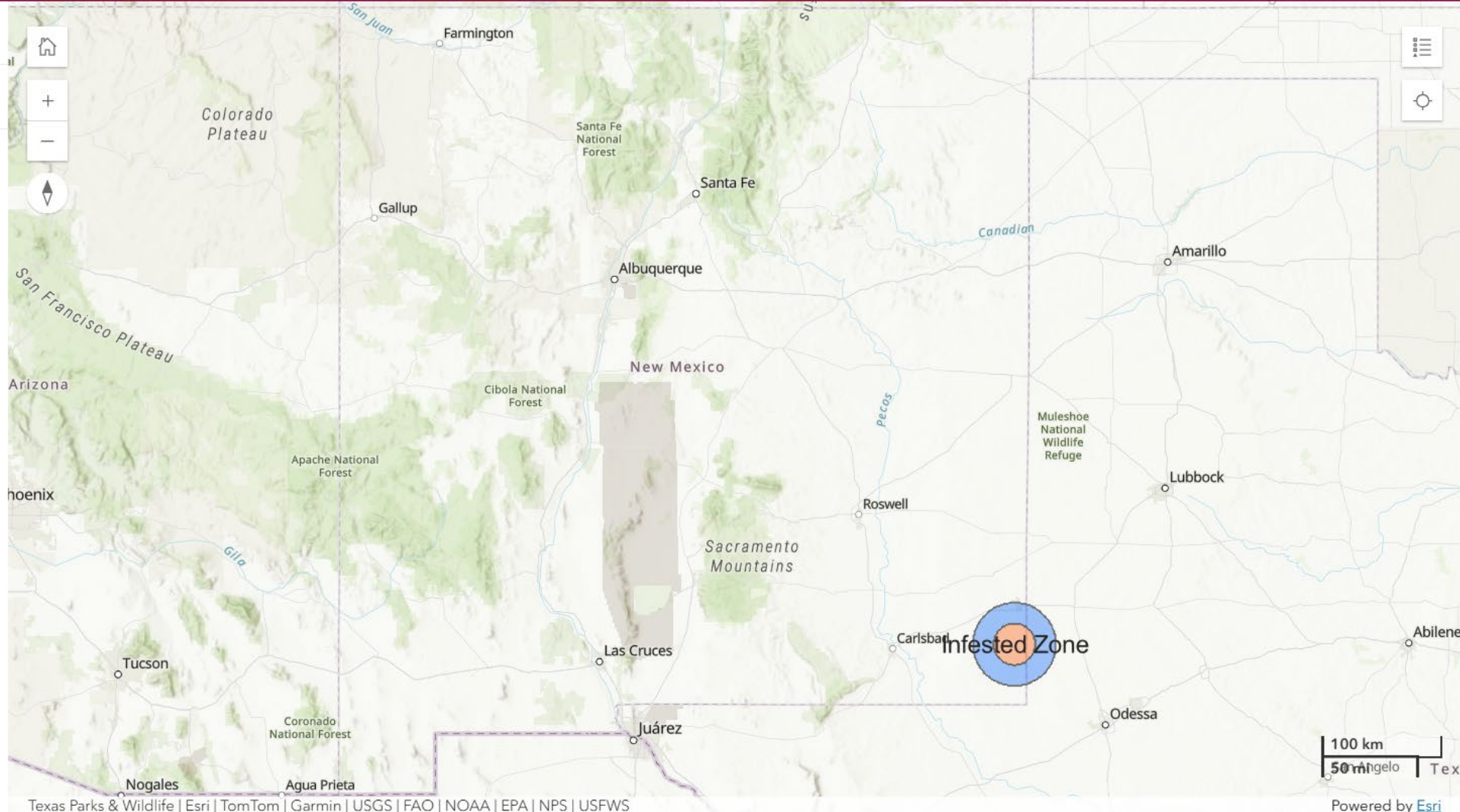
Search to learn more about a location and its surrounding area.

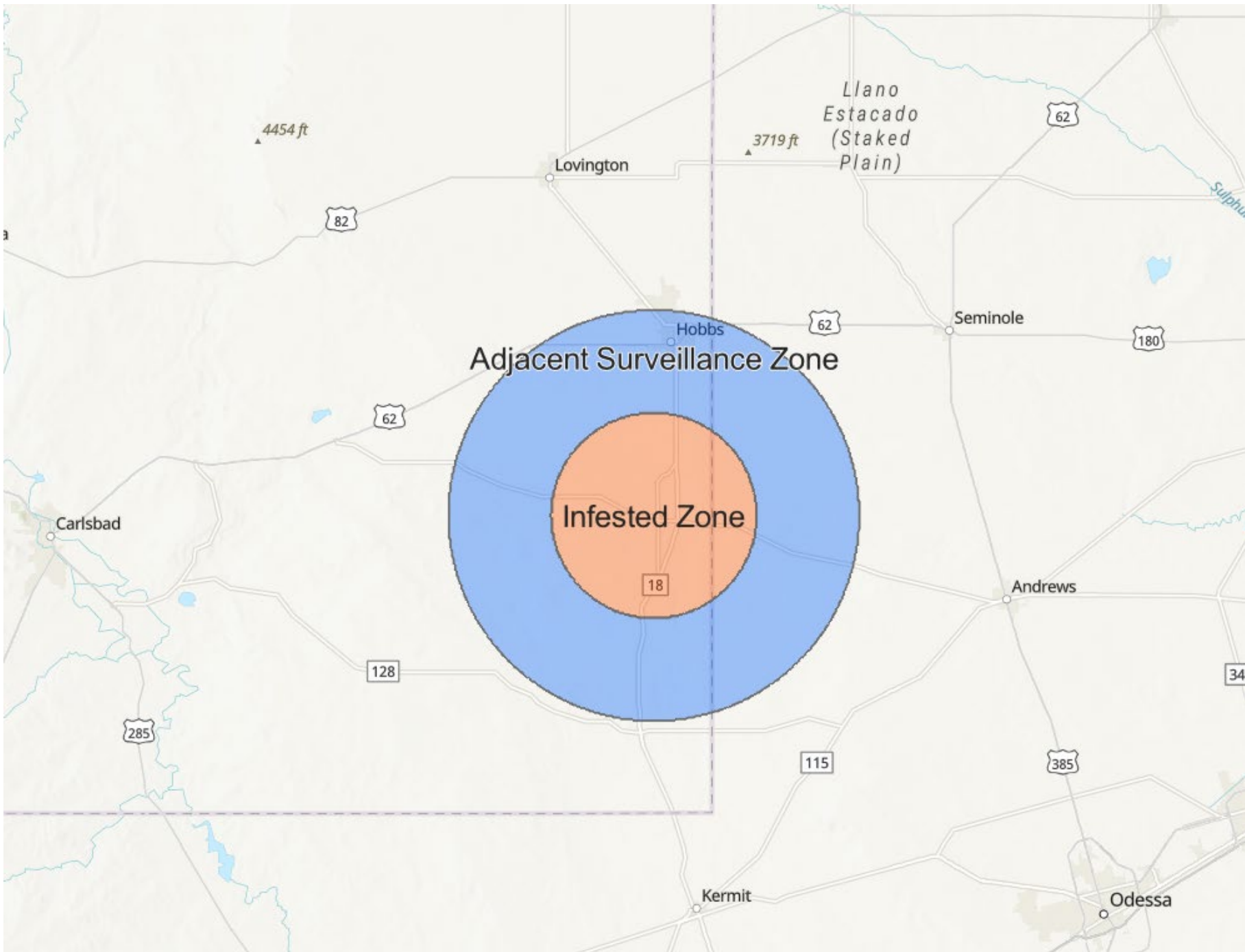
Use one of the following search methods:

- Click the search box above and type in an address or choose **Use current location**
- Click within the map

Results will include information about features of interest.

Additional information can be found at screwwormnm.org.





Find address or place

New World Screwworm Zone Search

Search an address to see if you are in a New World screwworm zone.

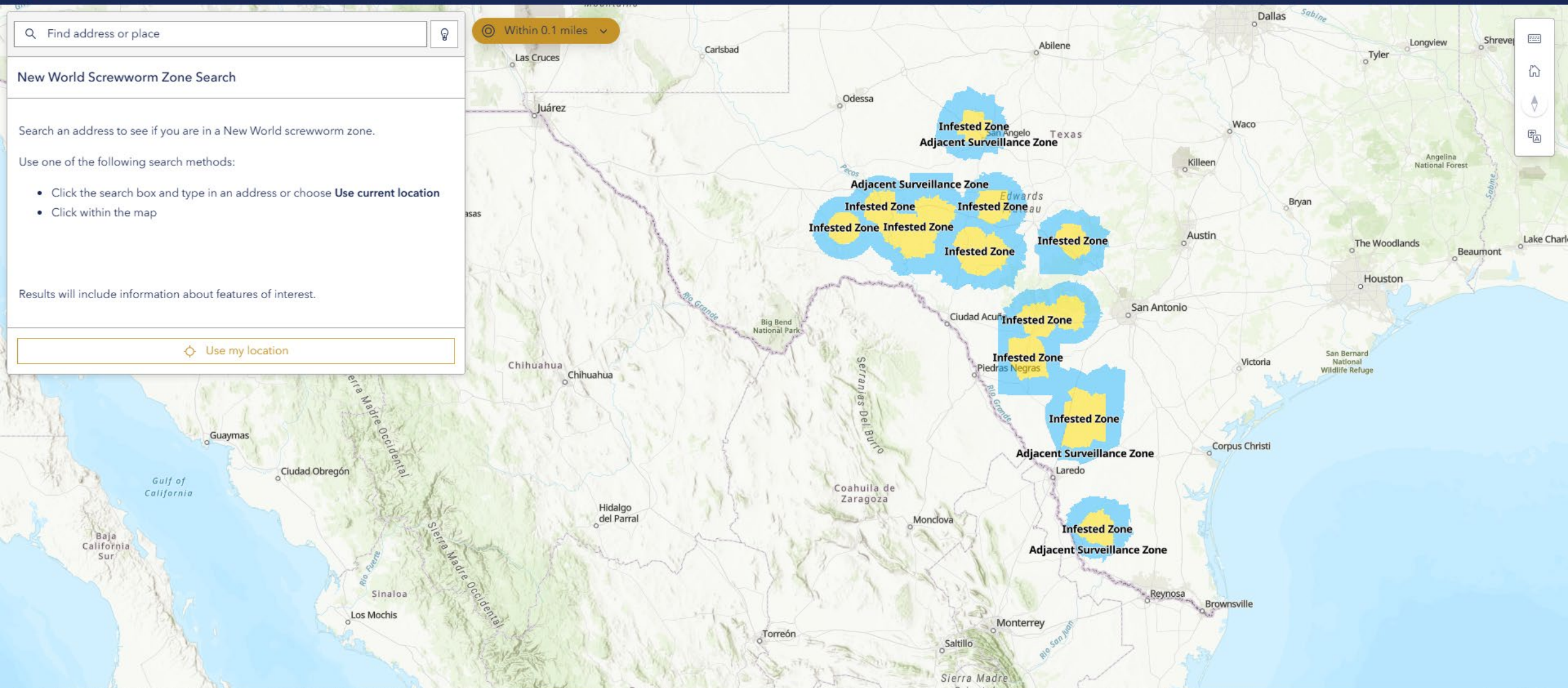
Use one of the following search methods:

- Click the search box and type in an address or choose **Use current location**
- Click within the map

Results will include information about features of interest.

 Use my location

Within 0.1 miles



Who to Contact

- All livestock (including poultry) - NMLB
- Companion animals - NMLB
 - Emergency Animal Health Declaration
- Wildlife – NM Dept of Wildlife (NMDGF)
- Humans – NM Dept of Health
- Local Resources:
 - Veterinarians
 - Cooperative Extension Agent
 - Land Board (Navajo Nation)



screwwormNM.org