

New World Screwworm (NWS) Response

Ready Reference Guide – Establishing and Releasing NWS Zones and Areas

Establishing NWS Zones and Areas

Zones and Areas



Example of an Expanding Infested Zone



An Infested Zone will be established when NWS is detected in domestic animals or wildlife, with resulting NWS establishment, or there is a detection of the NWS wild fly. The figure on the right demonstrates how the Infested Zone will expand in the direction of additional NWS detections.

Summary of NWS Zone and Area Designations

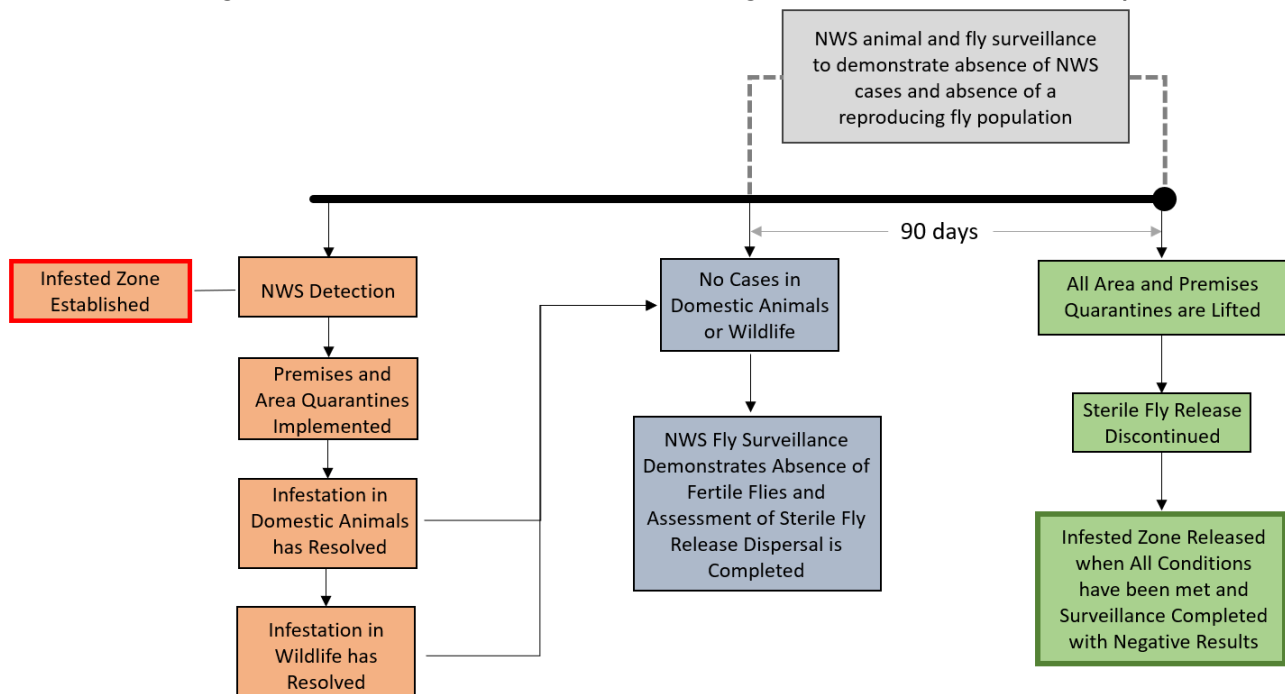
Zone/Area	Definition	Minimum Size and Details
Infested Zone (IZ)	Zone that immediately surrounds 1) a premises with an infested domestic animal or 2) the location of infested wildlife, when NWS establishment is determined based on surveillance and/or epidemiological investigation, or 3) the location of NWS wild fly detections.	Perimeter is at least 20 km (~12.43 miles) beyond the perimeter or location of an infested animal or NWS wild fly detections. The zone may expand with additional NWS detections based on epidemiological circumstances.
Adjacent Surveillance Zone (ASZ)	Zone that immediately surrounds an IZ. An ASZ may initially be established to surround an NWS isolated or suspect case if it is located outside an established IZ and 1) it has a travel history outside the United States to a screwworm-infested country within the previous 10 days, 2) early case detection/treatment prevented larval development in the area as demonstrated through surveillance, or 3) is a suspect case that is not available to be sampled, such as suspect wildlife based on wildlife camera images. An IZ should immediately be established anytime NWS establishment is determined.	Perimeter should be 20 km (~12.43 miles) beyond the perimeter of the IZ. The size of the ASZ is maintained at a 20 km perimeter when the IZ expands.
Fly Surveillance Area (FSA)	Area that overlaps the IZ and ASZ and extends outward from an NWS detection based on fly habitat and geographic range.	Between 0 to 200 km (~124.27 miles) from an infested animal or NWS wild fly detection. The sizing of the FSA border is based on environmental assessment and may not extend equally in all directions.

Releasing an Infested Zone and Demonstrating the Area is Free from NWS

Demonstrating an Infested Zone is free of NWS infestation will be based on surveillance that includes trapping of flies and assessment of sterile fly dispersal, and visual inspection of animals for myiasis. Depending on specific weather and seasonal conditions in the area(s) of infestation, surveillance should be carried out in an Infested Zone for 3-4 NWS life cycles past the last NWS detection before the Infested Zone is released. Suitable habitat and environmental and climatic factors impact the timeline of the NWS life cycle, and therefore, the timeline for releasing an Infested Zone. In temperate climates, this is generally at least 3 months (~24 days/life cycle) past the last NWS detection during an outbreak (Figure 1); this timeline may be shorter or longer in different locations within the United States.

Additional surveillance for international and bilateral trading partners may be necessary both prior to and after the release of the Infested Zone. The extent, frequency, and type of additional surveillance required will depend on many factors, such as (but not limited to) the density of domestic animals and wildlife in the region, species, epidemiological information, environmental and climatic information, and commodity exported. The objective of this surveillance is to provide evidence of the absence of NWS to satisfy international and bilateral trading partners. Active and passive surveillance schemes may be used.

Figure 1. Releasing an Infested Zone and demonstrating an area NWS-free in temperate climates



Definitions

NWS establishment: a self-sustaining and reproducing NWS population that is present and active in an area. Includes introduction of the pest into the United States that has progressed from an isolated, contained case to a reproducing NWS population as demonstrated through surveillance and/or epidemiological investigation. NWS establishment indicates an NWS outbreak.

NWS isolated case: a confirmed animal NWS infestation that is contained to the initial finding and does not indicate a wider, self-sustaining NWS pest population in the area. The case must have a history of movement from an Infested Zone or a country recognized as affected with NWS to be designated as an NWS isolated case.

For more information, please go to: <http://www.aphis.usda.gov/fadprep>
For the NWS Response Playbook, click [here](#).