USDA
United States Department of Agriculture
Animal & Plant Health Inspection Service

Cooperative Fruit Fly Emergency Response Triggers & Guidelines

	Emergency Response Triggers[i]			
	Delimitation	**Duration of Delimitation[ii]** (# generations for single fly detections)	**Eradication[iii]**	**Quarantine[iv]**
Mated female of any genus and species of fruit fly presumed or known to be mated to a wild male[v]; a larva or pupa	1 mated female or immature stage	F3	1 mated female or immature stage	1 mated female or immature stage
Ceratitis capitata (Medfly) and other species within the genus *Ceratitis*	1 fly	F3	2 flies within a 3 mile (4.8 km) radius during 1 life cycle	**2 flies** within a 3-mile (4.8 km) radius during 1 life cycle
Bactrocera dorsalis (Oriental FF) Other *Bactrocera* species responding to methyl eugenol (ME): *B. zonata* (Peach FF), *B. correcta* (Guava FF), etc.	1 fly	F2	2 flies within a 3 mile (4.8 km) radius during 1 life cycle	If ALL finds are >4.5 miles (7.2 km) from commercial host production area: **8 flies** (either sex) within a 3-mile (4.8 km) radius during 1 life cycle. If any find is <4.5 miles (7.2 km) from commercial host production area: **6 flies** within a 3-mile (4.8 km) radius during 1 life cycle.
Other *Bactrocera* species that do not respond to methyl eugenol: *B. latifrons*, (Solanum FF), *B. albistrigata* (white-striped FF), etc. *Zeugodacus cucurbitae* (melon fly)	1 fly	F3	2 flies within a 3 mile (4.8 km) radius during 1 life cycle	**2 flies** within a 3-mile (4.8 km) radius during 1 life cycle
Anastrepha ludens (Mexfly)	1 fly	F2	2 flies within a 3 mile (4.8 km) radius during 1 life cycle	**5 flies** within a 3-mile (4.8 km) radius during 1 life cycle
Other *Anastrepha* species: *A. serpentina* (Sapote FF), *A. obliqua* (West Indian FF), *A. fraterculus* (South American FF), etc.	1 fly	F3	2 flies within a 3 mile (4.8 km) radius during 1 life cycle	**2-5 flies** within a 3-mile (4.8 km) radius during 1 life cycle; if an *Anastrepha* species is not a regulated pest in the detection area, it may not require quarantine

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Rhagoletis cerasi (European cherry FF)	1 fly	F1	2 flies within a 3-mile (4.8 km) radius during life cycle	**2 flies** within a 3-mile (4.8 km) radius during life cycle. Given the short cherry season in some regions, preemptive ECFF quarantines can be established if a spread model and delimitation trapping indicate that ECFF is likely to reach quarantine triggers in the following growing season.
All other adult exotic fruit flies detected in the United States	1 fly	F3	2 flies within a 3 mile (4.8 km) radius during 1 life cycle	**2 flies** within a 3-mile (4.8 km) radius during 1 life cycle

All fruit fly triggers are subject to reassessment by the Fruit Fly Exclusion and Detection Cross Functional Working Group.

(Revised December 4, 2020)

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[i] In several regions of the United States, USDA APHIS PPQ and state cooperators engage in year-round or seasonal detection trapping for exotic fruit flies. Detection trapping densities should be replaced with delimitation trapping when emergency responses are triggered according to the criteria in this table. Consult regional fruit fly action plans for species- and region-specific operational requirements.

[ii] If no additional flies are found during the requisite number of generations, then the individual fly collected is presumed to have been transient and not to have reproduced. The more attractive the lure that is available for the fruit fly, the fewer generations are necessary for delimitation.

[iii] Eradication is initiated prior to reaching a federal quarantine.

[iv] Triggers for establishment of a new quarantine and expansion of an existing quarantine are the same. In other words, non-trigger detections adjacent to a quarantine would not trigger expansion of the quarantine.

[v] If a mated wild female is captured within an existing Sterile Insect Technique Preventative Release Program (SIT PRP) then an evaluation takes place by program management or Cross Functional Working Group (CFWG) to assess the likelihood of a fertile to fertile mating. The assessment will consider the overall effectiveness of the PRP that has been ongoing in the area and pattern of sterile captures (fly/trap/day or FTD) in the area.