

TEB Manager's Meeting

June 2023



TEB Manager's Meeting

June 2023



TEB – Monthly Statistics
Airport Manager
Maria Sheridan

TEB MAY 2023 Statistics



Presented at the JUNE 2023 – Airport Manger’s Meeting

	2023	2022	% Change
Month A/C Ops	16,687	16,596	1 %
Month Jet Ops	14,138	14,142	0 %
YTD A/C Ops	68,463	67,714	1 %
Fuel (gals)	5,538,552	5,078,180	9 %
YTD Fuel	23,893,267	23,753,331	1 %
Int’l Arrivals	852	856	0 %
YTD Int’l Arr.	3,775	3,720	1 %

Highest Activity Day: 734 – Wednesday, May 17th

Day(s) w/ Ops Over 500: 22 **Over 600:** 10 **Over 700:** 1

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Airport Operations Update
Manager, Airport Operations & Security
Scott Marsh

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Airport Operations – Airfield Construction Project Update

Communications Equipment Upgrades

- **Building 27 – ARFF Garage (Fire House)**
- **REILS (Runway End Identifier Lights)**
 - **RWY 19**
 - **RWY 24**

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Airport Operations – Airfield Construction Project Update

FAA Construction – Scheduled to start July 10, 2023

- RWY 01 VASI upgraded to PAPI (2023)
- Power Distribution Upgrades to: (2023)
 - RWY 01 VASI/PAPI
 - RWY 01 REILs
 - RWY 06 GS
 - RWY 06 LOC
 - RWY 24 PAPI
 - ASOS

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Airport Operations – Construction Project Update

➤ FAA Control Tower

- Continuing as scheduled
- Fall 2024 full-service commissioning

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Airport Operations – Project Update

➤ Local Airport Update

MMU

- RWY 5/23 Rehabilitation Project
 - Full Airport Closures - June 23, 24, 25, and 26 each night from 2200L – 0600L
 - RWY 5/23 Long Term Closure for 30-days from July 10 – August 10

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Airport Operations – Traffic Outlook

➤ June Events

Belmont Stakes – June 10

Tony Awards – June 11

US Open Golf in LA – June 15 – 18

July 4th Departures – June 28

➤ July Events

July 4th Holiday

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FAA Safety Bulletin



U.S. Department
of Transportation
Federal Aviation
Administration

SAFO

Safety Alert for Operators

SAFO 18015
DATE:11/13/18
Revised:05/19/23

Flight Standards Service
Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo

A SAFO contains important safety information and may include recommended action. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO. The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.

Subject: Jet Fuel Contaminated with Diesel Exhaust Fluid (DEF).

Purpose: This SAFO alerts and advises aircraft operators, Fixed-Base Operators (FBO), certificated repair stations, and foreign civil aviation authorities of events in which aircraft were fueled with jet fuel contaminated with DEF.

Background: The FAA has identified four cases of DEF contamination affecting multiple turbine engine aircraft. Three of those events occurred in the United States and one in Brazil. In all cases, the affected aircraft experienced in-flight operational malfunctions, such as uncommanded inflight engine shutdown, resulting in emergency landings. In these cases, DEF was inadvertently confused with fuel system icing inhibitor (FSII) when servicing refueling vehicles. The documented events are summarized as follows:

- a. Eppley Air Field Airport (OMA) in Omaha, NE, November 18-21, 2017. During the period between November 18 and November 21, 2017, seven airplanes were fueled with jet fuel containing DEF at OMA. During the same time period, an additional six airplanes were fueled using refueling equipment that had been exposed to DEF. The DEF was inadvertently used (instead of FSII) on two refueling vehicles at OMA and injected into the fuel with each truck's FSII injection system. On December 26, 2017, the FAA published a Special Airworthiness Information Bulletin (SAIB) HQ-18-08R1, Engine Fuel and Control – Operation with Contaminated Jet Fuel, to address the events of the DEF contamination at OMA.
- b. Miami-Opa Locka Executive Airport (OPF) in Miami, FL, August 12-16, 2018. Between August 12 and August 16, 2018, five aircraft were identified as being fueled with jet fuel containing DEF at OPF. During the same time period, nine other aircraft were identified as being fueled using refueling equipment that had been exposed to DEF. An investigation revealed that DEF was inadvertently used instead of FSII on a refueling vehicle at OPF, and was injected into the fuel with the truck's FSII injection system. This affected both the aircraft receiving the contaminated fuel and the aircraft that were fueled with the refueling equipment that had been exposed to DEF. To address the events at OPF, the FAA issued SAIB HQ-18-28, Engine Fuel and Control – Operation with Contaminated Jet Fuel, dated September 13, 2018.
- c. Punta Gorda Airport (PGD) in Punta Gorda, FL, May 9, 2019. Two Cessna Citation 550s were fueled with fuel contaminated with DEF. The first Cessna Citation 550 experienced an engine flameout at 35,000 feet, then experienced the second engine flameout at 8,000 feet on approach to

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Savannah Hilton Head International Airport (SAV). The flight crew landed at SAV with both engines inoperative. There was no other damage or injuries. The second Cessna Citation 550 experienced an engine flameout at 36,000 feet and landed with one engine inoperative at Louisville International Airport (SDF). There were no other damage or injuries.

The FBO at PGD fueled a total of seven aircraft, which is the only day the FBO used the refueling vehicle with DEF-contaminated fuel. Of the seven aircraft, only three were fueled from the vehicle's "front" meter, which is where the FSII injection line was located. To address the event, the FAA issued SAIB AIR-21-08, Engine Fuel and Control – Operation with Contaminated Jet Fuel, dated April 20, 2021.

- d. Brasilia International Airport (BSB), Brasília, Brazil, on October 9, 2014. Four aircraft had DEF injected; one of those aircraft returned to the airport due to having dual engine filter impending bypass warnings.

Discussion: In each of the four events, DEF was confused with FSII. The FBO inadvertently put DEF into the FSII tank on the refueling vehicles. All the aircraft identified had documented cases of clogged fuel filters and fuel nozzle deposits from DEF that led to service difficulties and emergency landings. Other aircraft that were fueled with the contaminated refueling equipment were exposed to trace amounts of DEF from residual fuel in the refueling hoses and equipment.

In each of the three events in the United States discussed above, DEF was confused with FSII, which is more commonly known by brand names "Prist®" and "Dice®," and is also referred to as DiEGME. DEF is a clear fluid that looks similar to FSII. FSII is used to address the potential for water within jet fuel to freeze when the aircraft is at altitude. FSII also prevents microbial growth in aircraft fuel tanks.

DEF is not a fuel additive and should never come into contact with diesel or any other fuel. On vehicles, it is stored in a separate tank, typically identified by a blue filler cap, as seen in Figure 1.

Figure 1: Example of a Blue Filler Cap Identifying DEF



The FAA has been working with the Aircraft Diesel Exhaust Fluid Contamination Working Group, hosted by the National Business Aviation Association (NBAA), along with an FAA Safety Risk Management (SRM) team, to develop procedures to improve labeling and container identification and improve process control. The FAA Aircraft Certification Service (AIR), Aircraft Evaluation Division (AED), and other Flight Standards Service (FS) organizations are developing guidance for FAA inspectors for evaluating operators' processes for controlling DEF and other potential fuel contaminants. DEF is a urea-based chemical and is not approved for use in any aviation application. When mixed with jet fuel, DEF will chemically react with the jet fuel to form crystalline deposits in the fuel system. These deposits will flow

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through the aircraft fuel system and may accumulate on filters, fuel metering components, other fuel system components, or engine fuel nozzles. The deposits may also settle in the aircraft fuel tanks or other areas of the aircraft fuel system where they may dislodge over time and accumulate downstream in the fuel system.

DEF forms crystalline deposits that are not soluble in fuel, so they cannot be removed by flushing the aircraft fuel system with jet fuel. Although the deposits are soluble in water and other polar solvents, use of these chemicals may have adverse consequences on aircraft and engine fuel system materials. Operators should contact Original Equipment Manufacturers (OEM) to develop inspection techniques and maintenance actions appropriate for each specific aircraft model type and its level of exposure.

Figure 2: Examples of Filter Deposits



Jet fuel that has been contaminated with DEF no longer meets the aviation fuel operating limitations of aircraft certificated to operate on Jet fuel, and therefore, cannot be used on those aircraft. Operators should ensure appropriate processes are applied to discard contaminated jet fuel removed from affected aircraft to ensure it is not used on aircraft.

The FAA has evaluated the system risk and has determined issuing an airworthiness directive (AD) is not warranted.

Further Reading:

- a. **SAIBs.** Subject: Engine Fuel and Control – Operation with Contaminated Jet Fuel. The following SAIBs, along with others, can be downloaded or viewed online at: [Link](#).
 - SAIB HQ-18-08, as revised.
 - SAIB HQ-18-28, as revised.

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FAA Safety Bulletin

- SAIB AIR-21-08, as revised.
- b. **FAA Advisory Circular, as revised.** FAA AC 150-5230-4 Aircraft Fuel Storage, Handling, Training, and Dispensing on Airports. This AC is available online at: [Link](#).
- c. **NTSB Safety Alert, dated July 2019.** NTSB Safety Alert for Fuel Providers: Prevent DEF Jet Fuel Contamination. This NTSB Safety Alert is available online at: [Link](#).
- d. **Industry Report, dated June 11, 2019.** Aircraft Diesel Exhaust Fluid Contamination Working Group Collaborative Industry Report on the Hazard of Diesel Exhaust Fluid Contamination of Aircraft Fuel. This report was generated by aviation industry representatives, the FAA, and was chaired by the NBAA. The paper covers many DEF-related subjects, including the following subjects:
 - DEF contamination safety analysis
 - DEF contamination mitigation strategies
 - Short- and long-term recommendations
 - Additional background, notices, and recommendations

This industry report is available online at: [Link](#).

- e. **Energy Institute Video for Fuel Operators.** Educational video on the control of fuel system icing inhibitor and diesel exhaust fluid at airports: [Link](#).

Recommended Action: The FAA recommends that owners or operators of aircraft affected by jet fuel contaminated with DEF do the following:

- a. Contact their aircraft, engine, and auxiliary power unit (APU) OEMs to determine the appropriate inspections and maintenance actions to remove urea-based crystalline deposits from the fuel system. This action may include removing and replacing fuel system parts or components affected by exposure to these deposits.
- b. On discovering a fuel contamination event, immediately inform the fueler so they can advise other owner/operators of the contamination. In past cases, fueling vehicles fueled multiple aircraft with the contaminated fuel. However, the operators of those aircraft were not informed until review of the fueling records.
- c. Discard any jet fuel that has been removed from an affected aircraft because it is suspected of being contaminated with DEF. The contaminated fuel should not be used on aircraft or other vehicles.
- d. Discuss fueling procedures with your fuel providers to address risks from fuel contamination.

Contact: Questions or comments regarding this SAFO should be directed to the AED at: 9-AVS-AFS-100@faa.gov (attention Propulsion Systems).

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FAA Safety Bulletin

WARNING

CHEMICALS IN UNLABELED CONTAINERS
IN THE AIRPORT FUELING ENVIRONMENT
ARE A THREAT TO SAFETY!

Don't foul the fuel



Fuelers have confused **DIESEL EXHAUST FLUID (DEF)** with aircraft **FUEL SYSTEM ICING INHIBITORS (FSII)**, which has resulted in serious fuel contamination events.

DO YOUR PART TO PREVENT A POTENTIALLY CATASTROPHIC AVIATION ACCIDENT

DON'T STORE
CHEMICALS
IN UNLABELED
CONTAINERS



DISCARD
CONTAINERS WHEN
CONTAMINATION
IS SUSPECTED

WHEN IN DOUBT, THROW IT OUT!

Store DEF and FSII containers
AWAY FROM EACH OTHER,
even when they are clearly labeled



Learn about the differences in packaging
and labeling of chemicals and the
hazards of CROSS-CONTAMINATION



**SAFETY
ALERT**

For more information, see [NTSB Safety Alert SA-79](#),
Fuel Providers: Prevent DEF Jet Fuel Contamination,
or visit www.nts.gov/air

NTSB National
Transportation
Safety Board

**PORT
AUTHORITY
NY NJ**

AIR LAND RAIL SEA

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Airport Security Update

➤ Audit Update

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Airport Operations

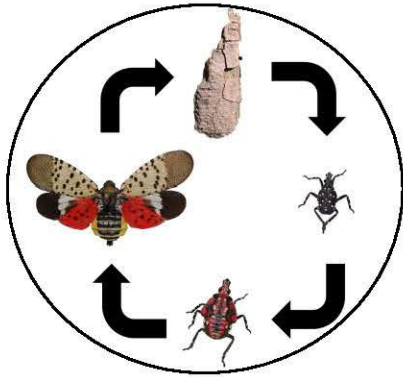
Spotted Lanternfly Update

Selen Nehrozoglu – USDA APHIS

Spotted Lanternfly: Information Brief



Selen Nehrozoglu, Spotted Lanternfly Technician
USDA, APHIS, Plant Protection and Quarantine



SLF Distribution and Biology

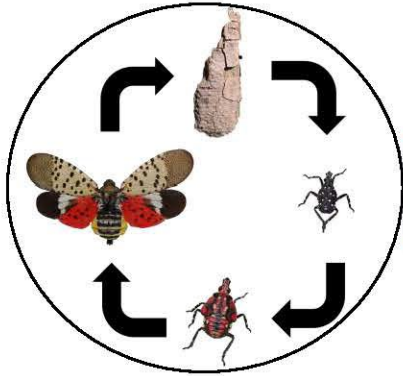


USDA Spotted Lanternfly Program



USDA Mitigation Strategies and Suggestions for Airports





SLF Distribution and Biology

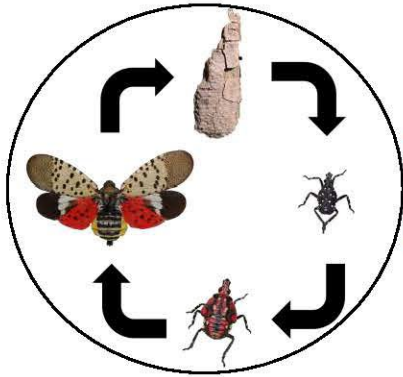


USDA Spotted Lanternfly Program



USDA Mitigation Strategies and Suggestions for Airports





SLF Distribution and Biology



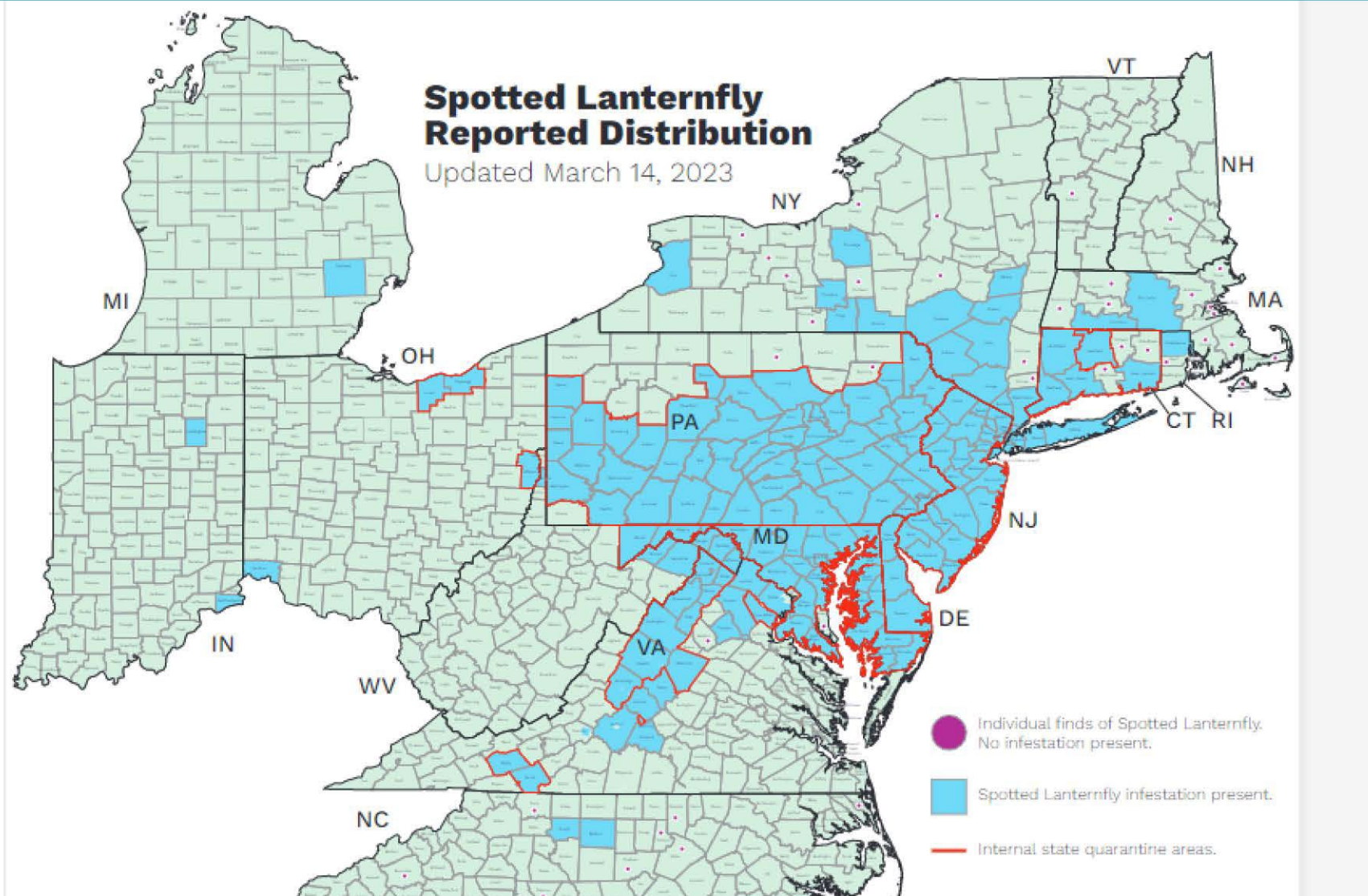
USDA Spotted Lanternfly Program



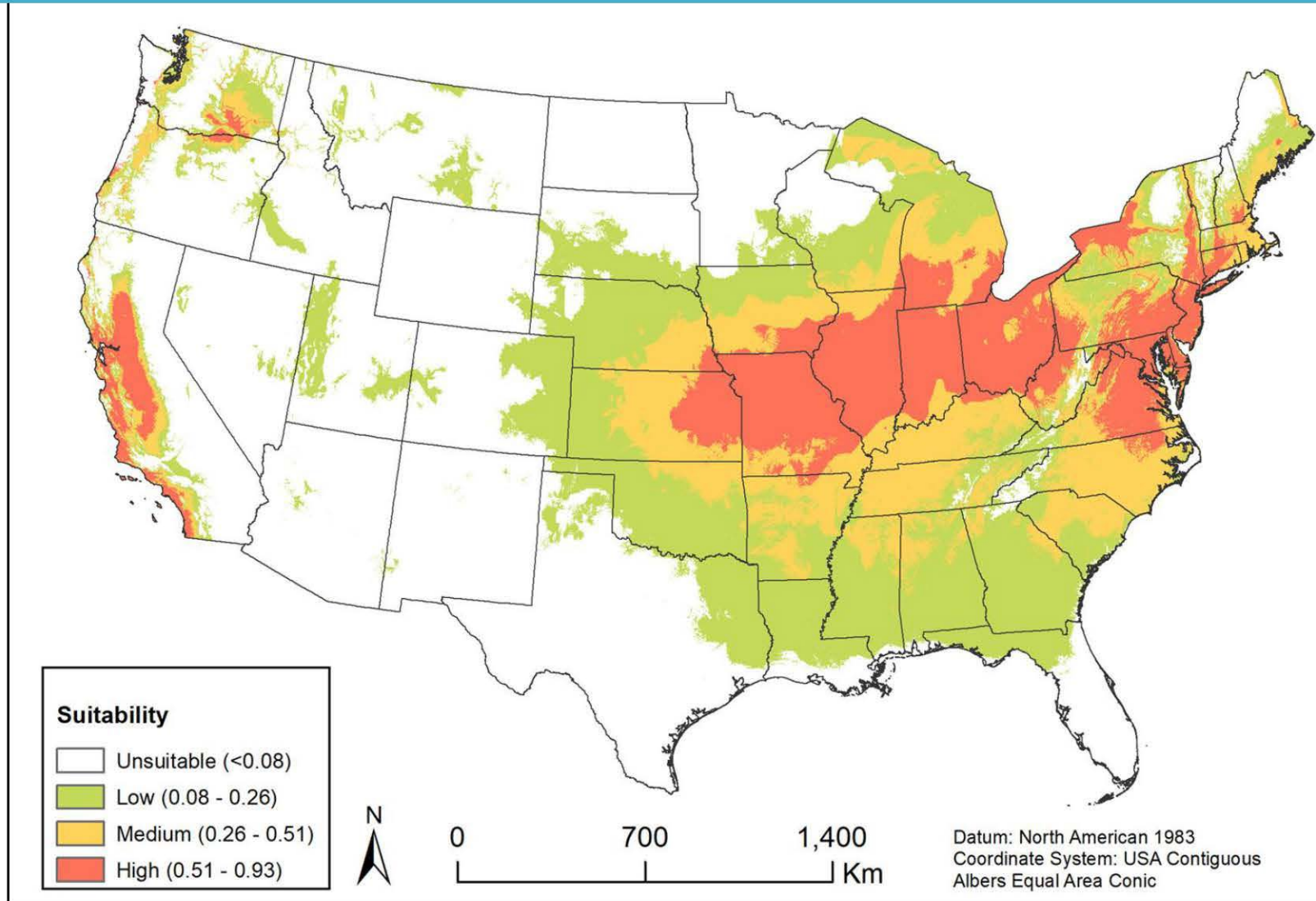
USDA Mitigation Strategies and Suggestions for Airports



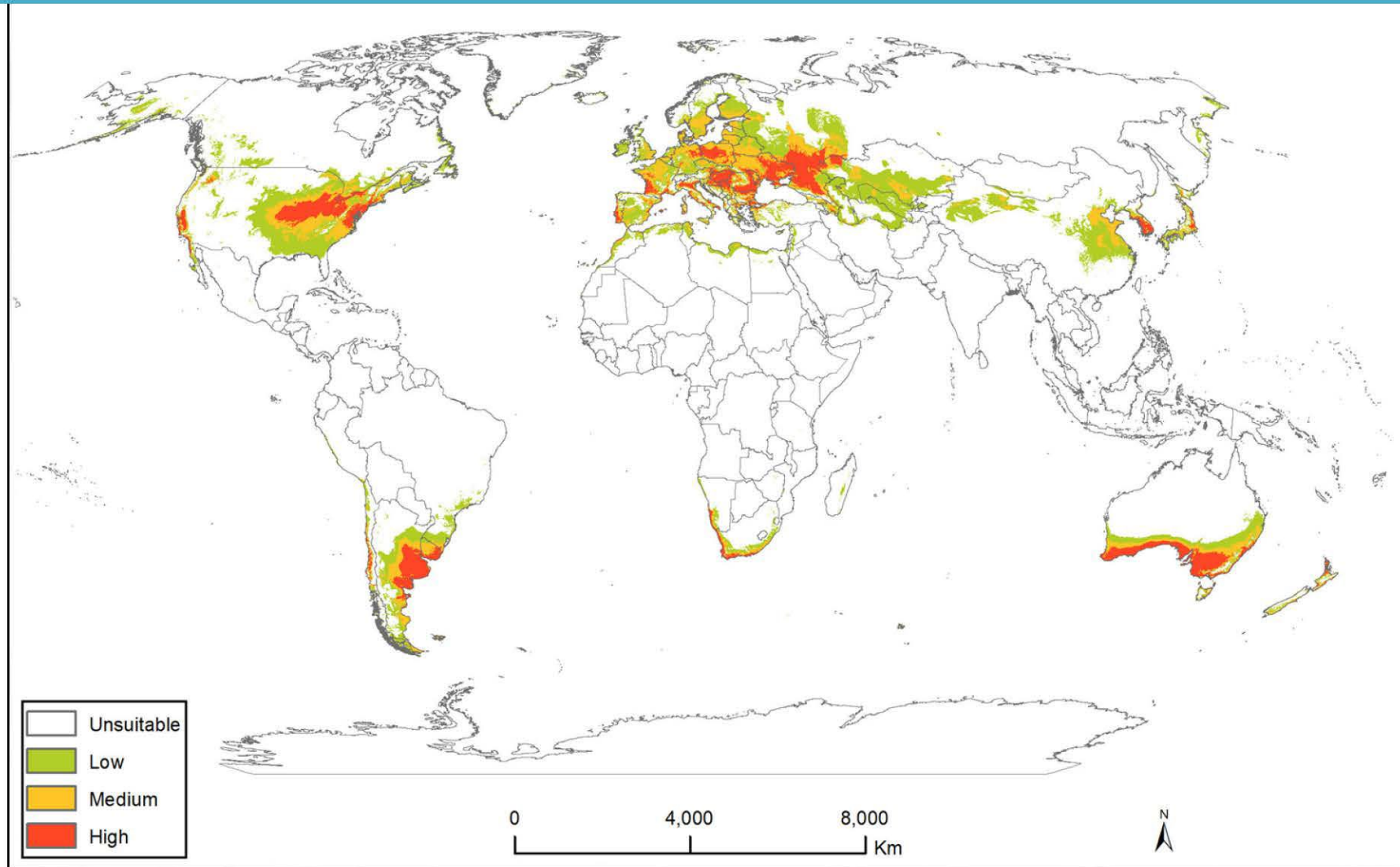
Current distribution



Suitable Habitat



Suitable Habitat

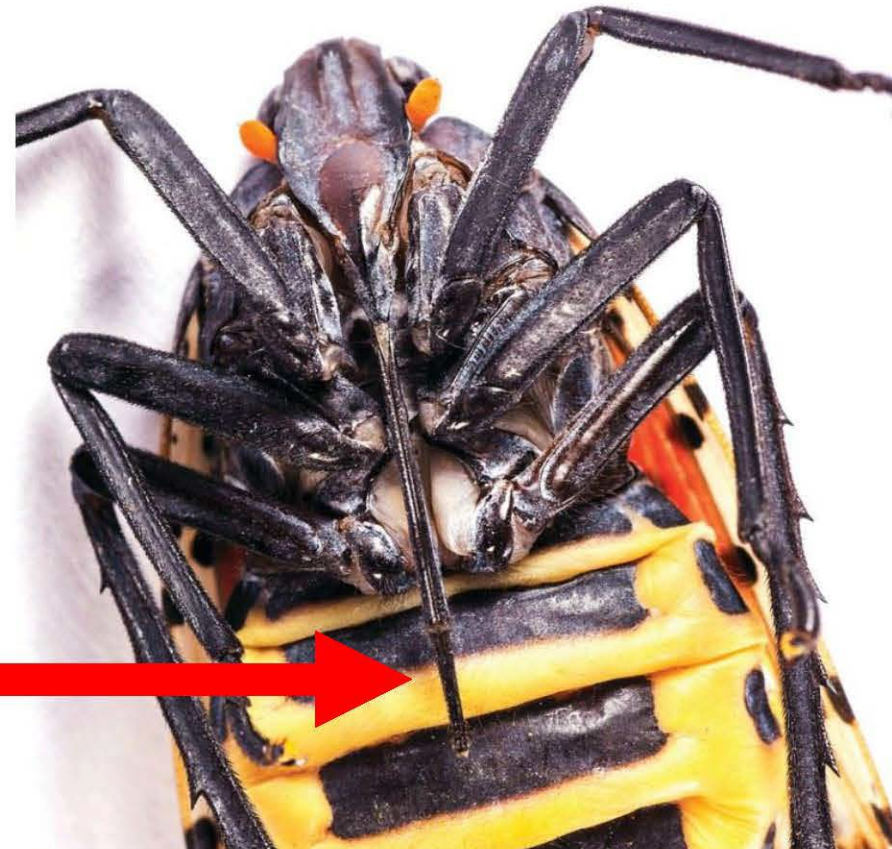


SLF biology

Spotted Lanternfly (*Lycorma deliculata*) is a Planthopper part of the “True Bugs” (Hemiptera)

- Specialized, non-retractable mouth for feeding on phloem (i.e., sap)
- Produces honeydew excreta

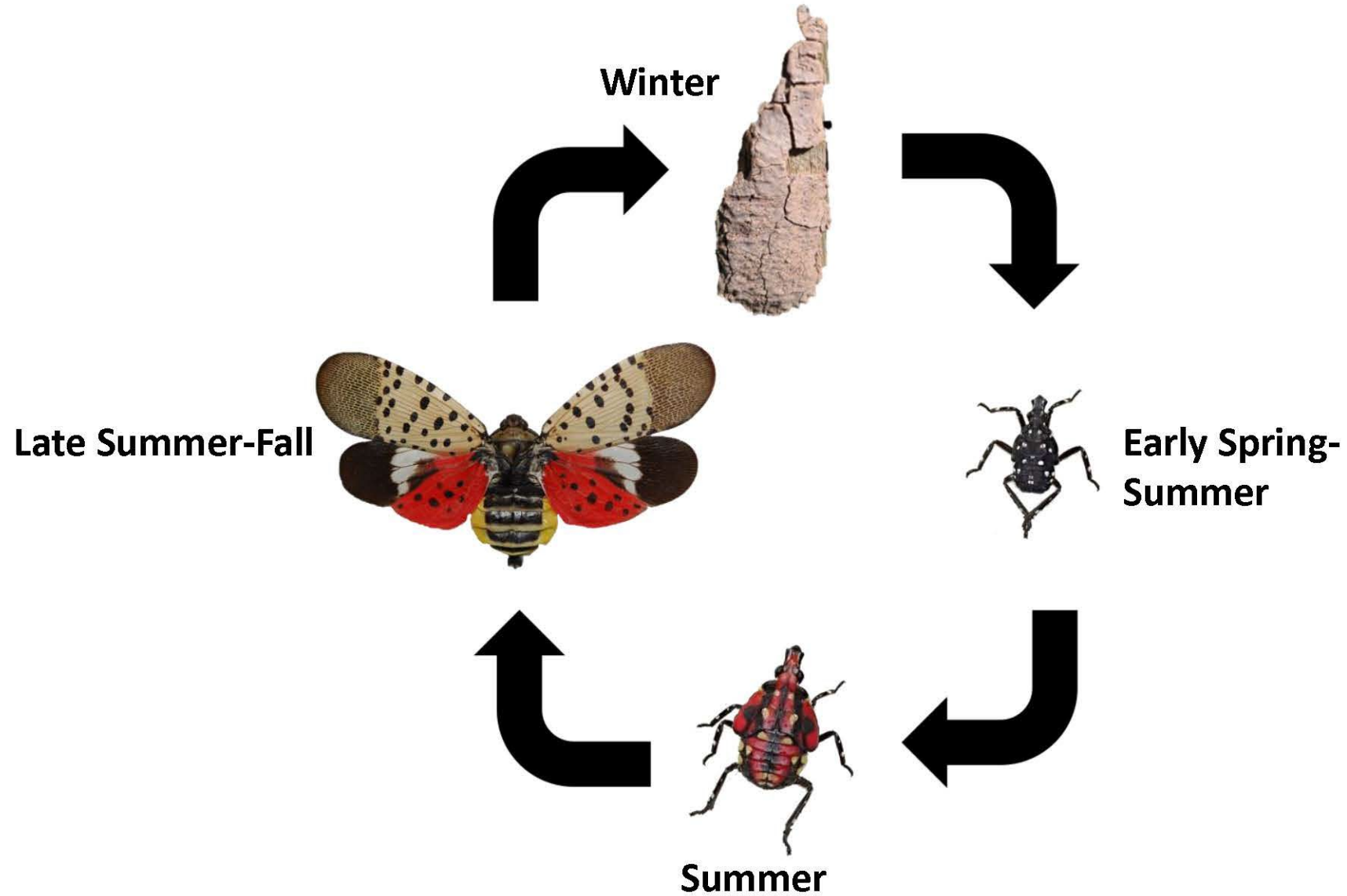
**Piercing-Sucking
Mouthparts**



SLF damage



SLF life cycle





What makes them a successful invader?

Generalist species

- Feeds on many species of plants

Reproduction

- Prolific breeder (2-3 egg masses per female)
- Lay eggs on multiple surfaces (camouflage on trees)

Good at dispersal

- Excellent hitchhiker

Over 80 species affected!

Native species

Agricultural species

Ornamental species



Successful Invader



USDA-Justin Martinez



USDA-Anthony Cullen



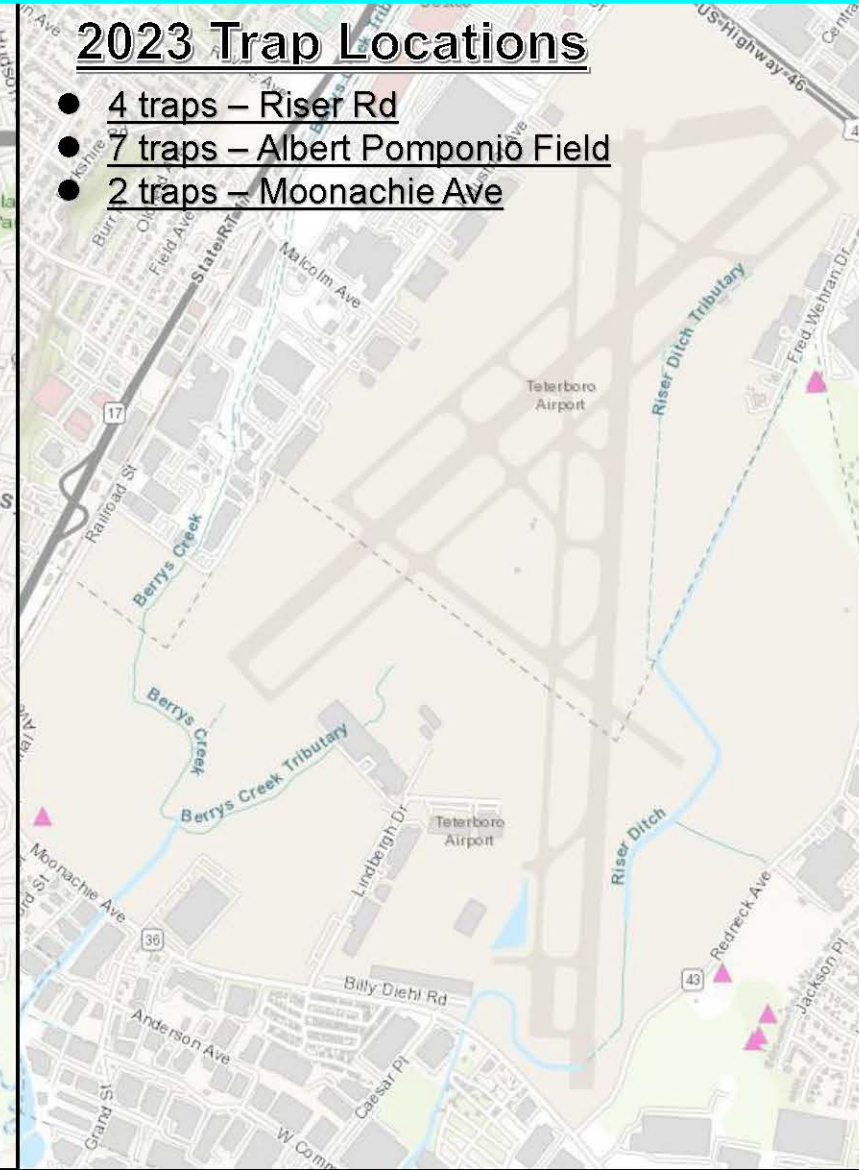
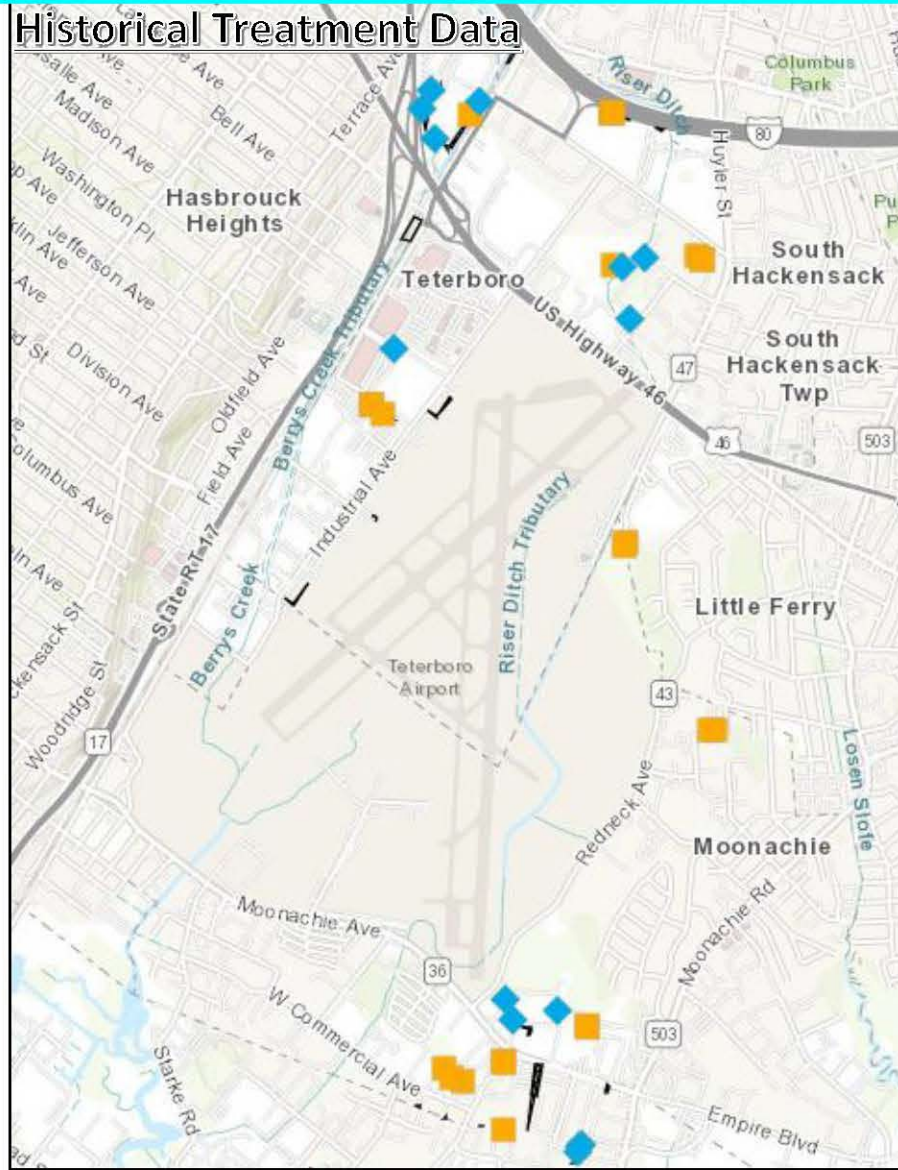
USDA-Casey McArdle



USDA



USDA Spotted Lanternfly Program



Suggested mitigation strategies

Two main mitigation strategies

1. Staff training and outreach
 - SLF identification
 - Best practices for pilots (2 hours before flight)
 - visual inspection of plane and baggage/cargo for nymphs, adults, and egg masses
 - Keep cabin doors and cargo holds closed until boarding of passengers and loading of baggage/cargo
2. Operations
 - Egg mass scraping
 - Trap around airport
 - Treat SLF using systemic and contact insecticides
 - Host tree herbicide treatment and removal

Staff Training and Outreach

Pest Alert

Spotted Lanternfly (*Lycorma delicatula*)

The spotted lanternfly is an invasive pest, primarily known to feed on tree of heaven (*Ailanthus altissima*) but has many other host plants, including grape, hop, apple, stone fruit, maple, poplar, walnut, and willow. The insect changes hosts as it goes through its developmental stages. Nymphs feed on a wide range of plant species, while adults prefer to feed and lay eggs on tree of heaven (*A. altissima*). Spotted lanternflies are invasive and can spread rapidly when introduced to new areas. While the insect can walk, jump, or fly short distances, its long-distance spread is facilitated by people who move infested material or items containing egg masses. If allowed to spread in the United States, this pest could damage the country's grape, orchard, and logging industries.

Distribution

The spotted lanternfly is present in China, Japan, South Korea, Taiwan, and Vietnam. In 2014, the insect was first detected in the United States in Pennsylvania. Since then, spotted lanternfly infestations have been detected in Delaware, Maryland, New Jersey, and Virginia.

Damage

Both nymphs and adults of spotted lanternfly cause damage when they feed, sucking sap from stems and branches. This can reduce photosynthesis, weaken the plant, and eventually contribute to the plant's death. In addition, feeding can cause the plant to ooze or weep, resulting in a fermented odor, and the insects themselves excrete large amounts of fluid (honeydew). These fluids promote mold growth and attract other insects.



Adult spotted lanternfly

Description

Adult spotted lanternflies are about 1 inch long and one-half inch wide, and they have large and visually striking wings. Their forewings are light brown with black spots at the front and a speckled band at the rear. Their hind wings are scarlet with black spots at the front and white and black bars at the rear. Their abdomen is yellow with black bars. Nymphs in their early stages of development appear black with white spots and turn to a red phase before becoming adults. Egg masses are yellowish-brown in color, and most are covered with a gray, waxy coating prior to hatching.

Life Cycle

The spotted lanternfly lays its eggs on smooth host plant surfaces and on non-host material, such as bricks, stones, and dead plants. Eggs hatch in the spring and early summer, and nymphs begin feeding on a wide range of host plants by sucking sap from young stems and branches. Adults appear in late July and tend to focus their feeding on tree of heaven (*A. altissima*) and grapevine (*Vitis vinifera*). As the adults feed, they excrete sticky, sugar-rich fluid (honeydew). The fluid can build up on plants and on the ground underneath infested plants, causing sooty mold to form.

Animal and Plant Health Inspection Service
Plant Protection and Quarantine

Where To Look

Spotted lanternfly adults and nymphs frequently gather in large numbers on host plants. They are easiest to spot at dusk or at night as they migrate up and down the trunk of the plant. During the day, they tend to cluster near the base of the plant if there is adequate cover or in the canopy, making them more difficult to see. Egg masses can be found on smooth surfaces on the trunks of host plants and on other smooth surfaces, including brick, stone, and dead plants.

Report Your Findings

If you find an insect that you suspect is the spotted lanternfly, please contact your local Extension office or State Plant Regulatory Official to have the specimen identified properly.

To locate an Extension specialist near you, go to the U.S. Department of Agriculture (USDA) website at nifa.usda.gov/Extension. A directory of State Plant Regulatory Officials is available on the National Plant Board website at www.nationalplantboard.org/membership.



Spotted lanternfly nymphs are black with white spots in early stages of development and turn red before becoming adults.



Covered and uncovered egg masses



Cluster of adults on the trunk of a tree at night

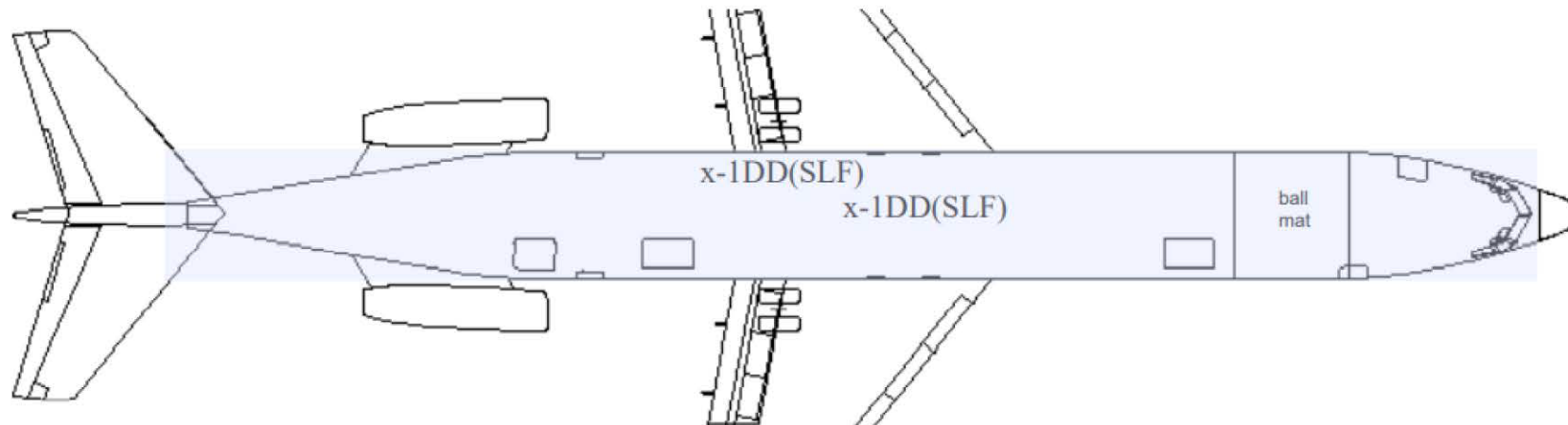
Staff Training and Outreach

High-Risk Pathways: airports and cargo planes

Spotted Lanternfly Program Support

- Inspecting for SLF at arrival and departure airports
- California established exterior quarantine measures for SLF in 2021

Indicate number, location and condition (DD, DF, M, A) of suspect(s) found on the following diagram:
(For live beetles, include the last 3 digits of the PDR number after indicating location, number, and condition)



Please note specific locations of suspects found, additional comments, notes, etc.

Two dead, dried suspect spotted lanternflies were found in the main cargo hold.

Stop the spread

Egg mass scraping



USDA-Anthony Cullen

Circle trapping



USDA-Andrew Gritzmaker



Helpful links

USDA:

<https://www.aphis.usda.gov/aphis/resources/pests-diseases/hungry-pests/the-threat/spotted-lanternfly/spotted-lanternfly>

https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-and-disease-programs/pests-and-diseases/sa_insects/slf

NJDA: <https://www.nj.gov/agriculture/divisions/pi/prog/pests-diseases/spotted-lanternfly/>

Rutgers Extension: <https://njaes.rutgers.edu/spotted-lanternfly/>

Penn State Extension: <https://extension.psu.edu/spotted-lanternfly>



United States Department of Agriculture

Questions?



TEB Manager's Meeting

June 2023



ATCT – FAA Update
Lazaro Arteaga

TEB Manager's Meeting

June 2023

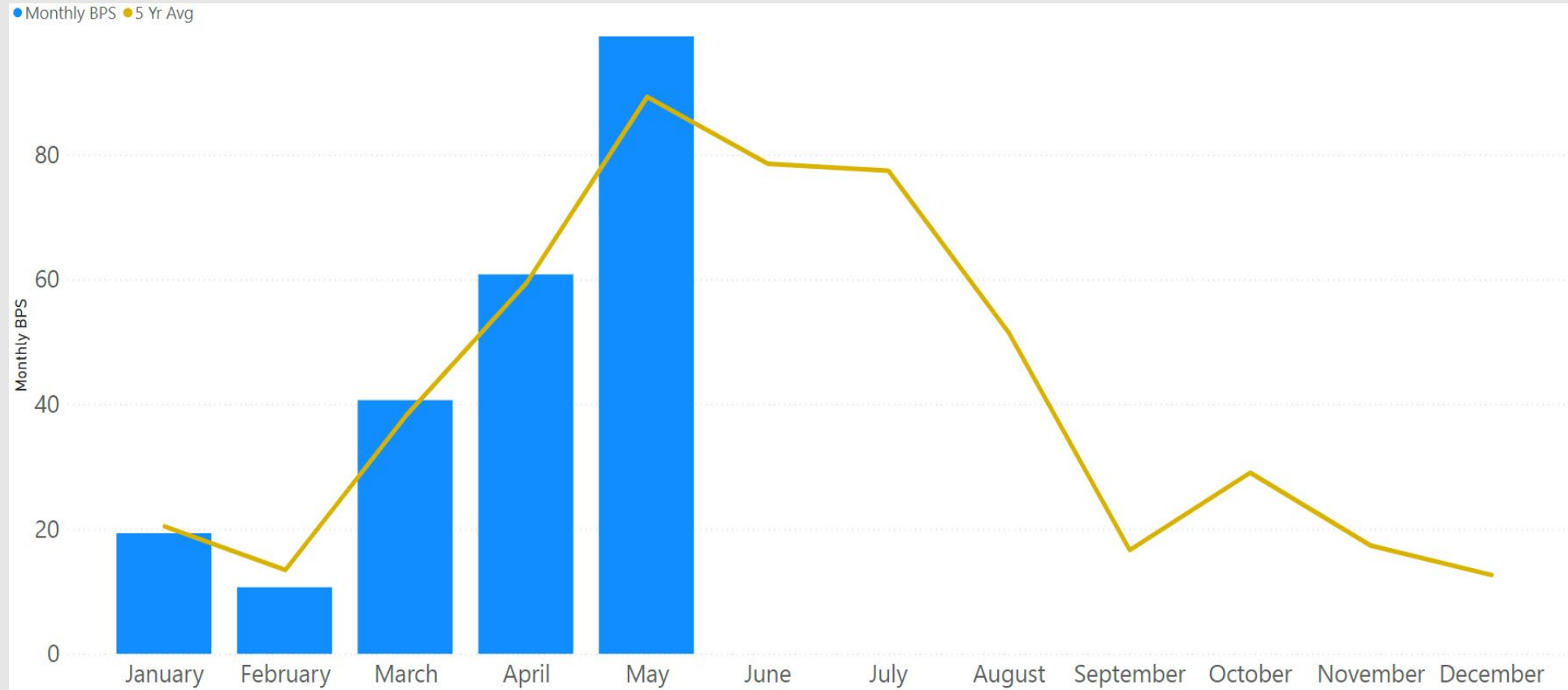


Wildlife Management Update

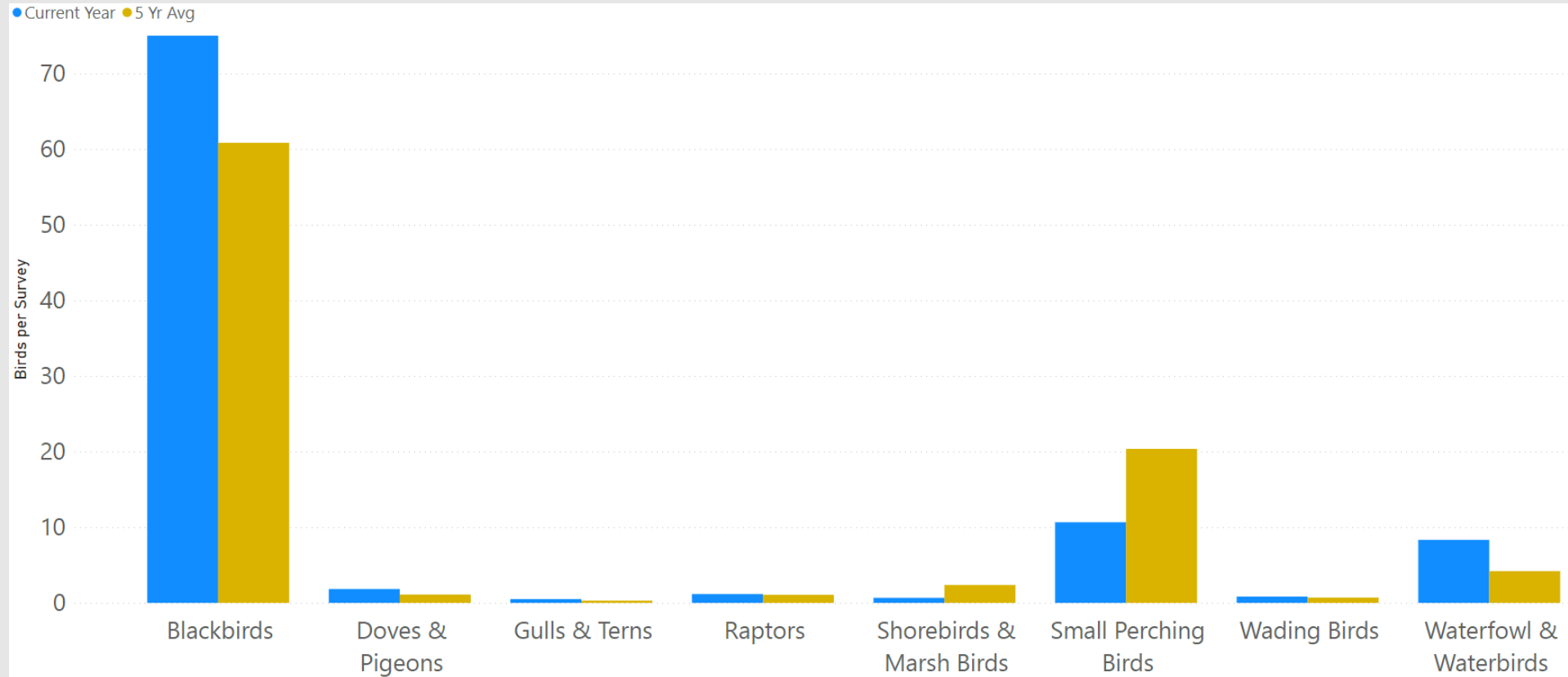
Terri Riotto – USDA



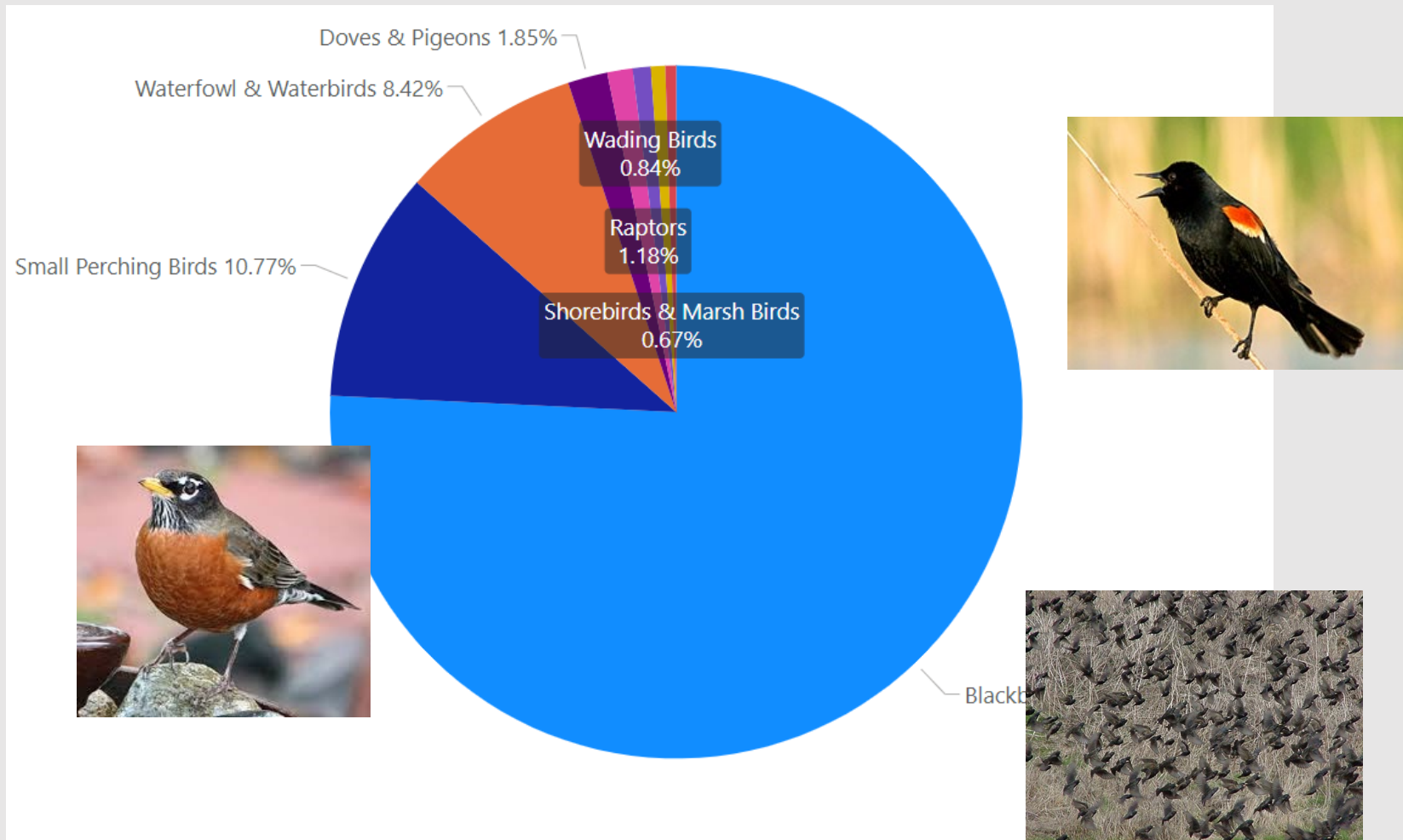
Average Number of Birds Observed per Survey



Average Number of Birds per Guild Observed per Survey



On-Airport Observations by Guild





Raptor Relocations

Month	Species	Number trapped and relocated
January	American kestrel	1
	Red-tailed hawk	1
March	American kestrel	7
	Red-tailed hawk	1
April	American kestrel	29
	Red-tailed hawk	1
May	Red-tailed hawk	1
YTD Total		41

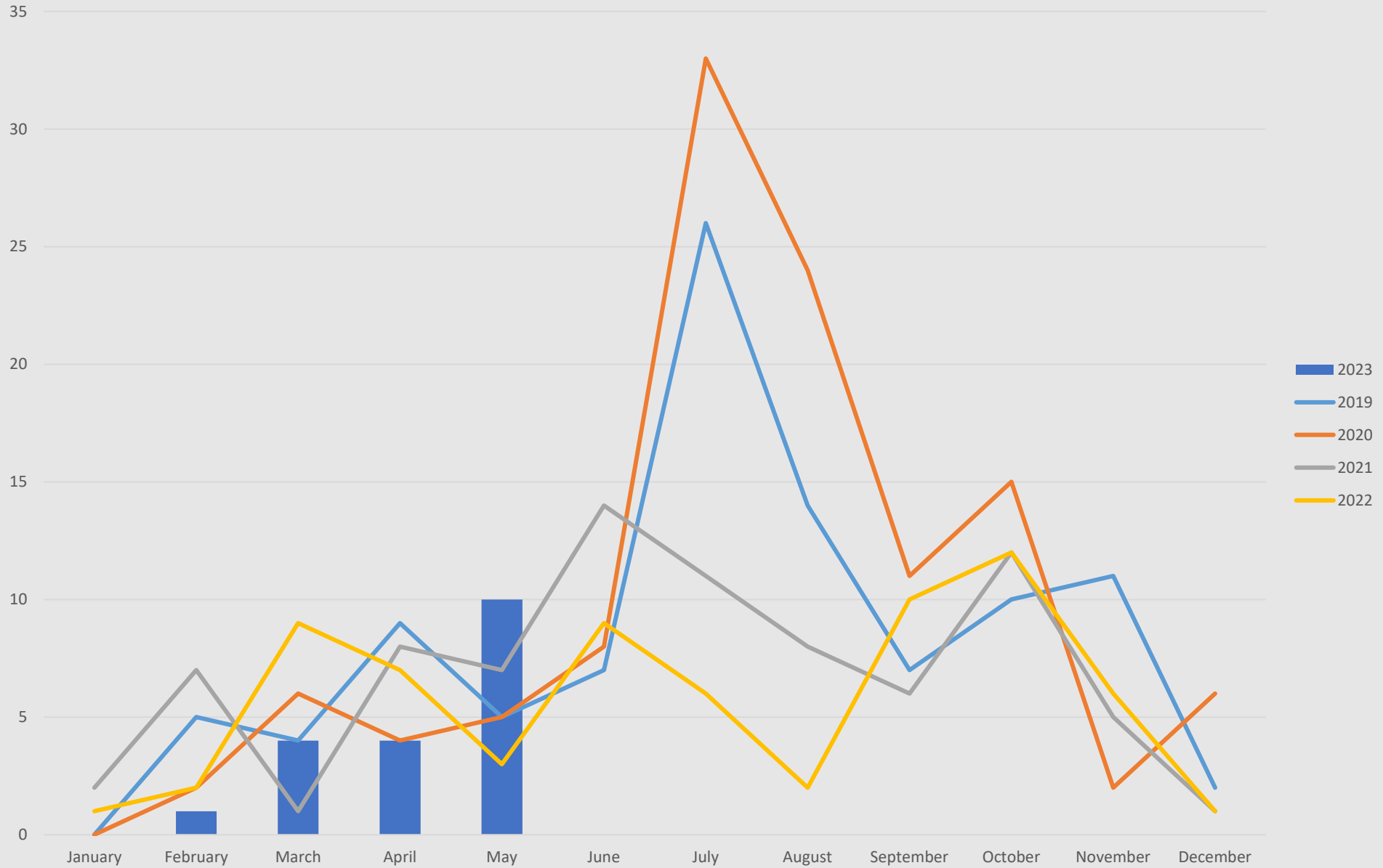
May Wildlife Strikes

Species	Strikes	Comments
American bittern	1	
American robin	1	
Barn swallow	2	
Killdeer	1	
Painted turtle	1	
Red-winged blackbird	1	
Snarge	1	
Unknown	1	
White-tailed deer	1	Aborted take-off
Total	10	





TEB Strikes 2019-2023



TEB Manager's Meeting

June 2023



TEB Noise Office Update
Gabe Andino



Noise Office Update

Airport Manager's Meeting

May 10, 2023

Noise Complaints May 2023

May 2023:

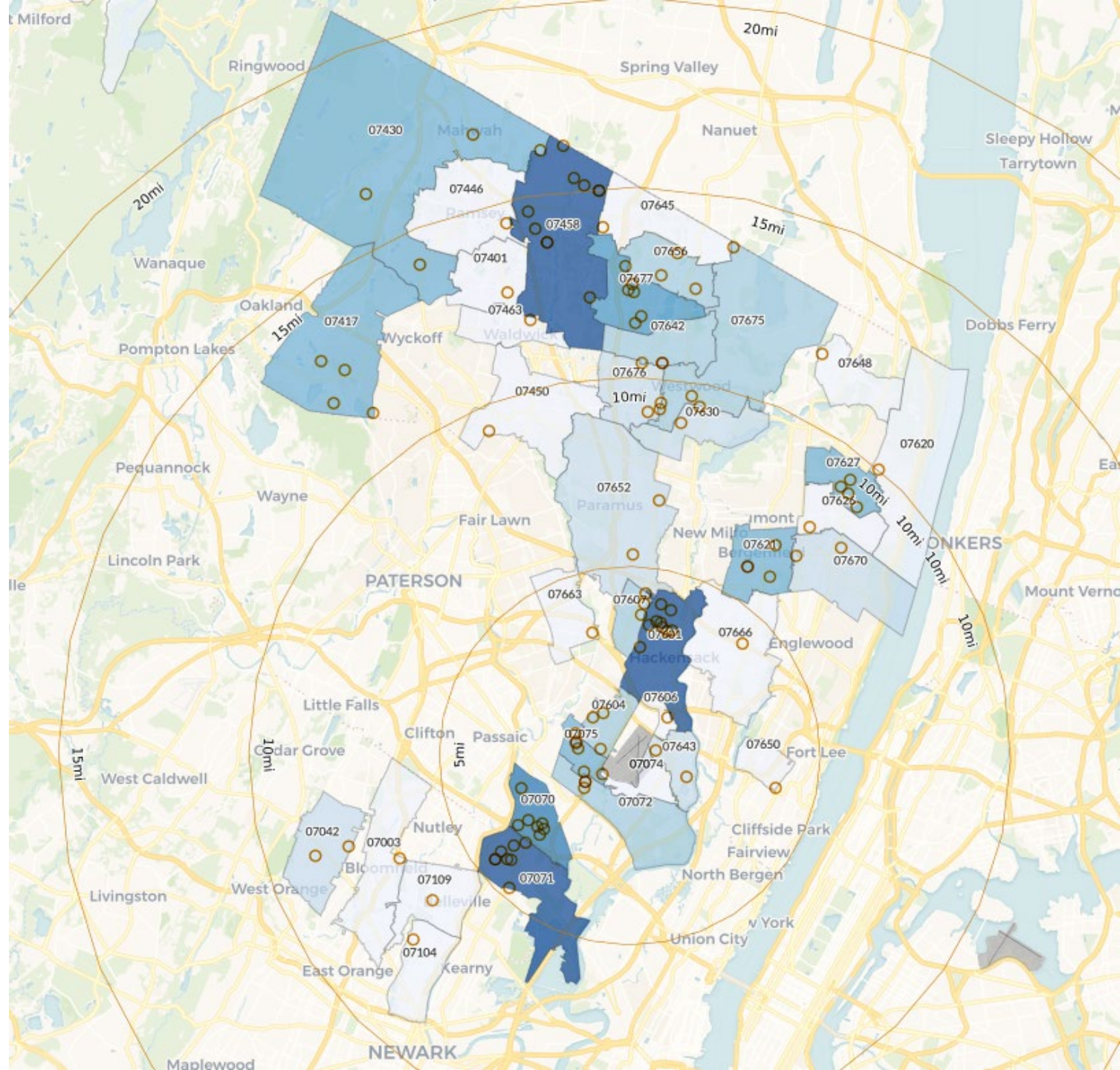
- 69% of complaints received related to arrivals
- 62% of complaints related to RWY 19 and RWY 06 arrivals
- 60% of complaints submitted via 3rd party app
- 86% of complaints submitted by 3 complainants

	2023		2022	
	Complaints	Callers	Complaints	Callers
May Complaints All Hours	7,102	121	10,881	251
YTD Complaints All Hours	30,920	364	36,786	697
May Complaints 10:00 PM - 7:00 AM	629	52	1,382	85
YTD Complaints 10:00 PM - 7:00 AM	3,335	154	4,596	210

Complaint Locations May 2023

Households within a 20-mile radius of TEB

- 69 households submitted complaints





May Noise Violations

Violation Level	May 2023	YTD 2023	May 2022	YTD 2022
First	8	28	4	25
Second	0	0	0	1
Third	0	0	0	0
Warning	8	15	1	13

TEB Manager's Meeting



OPEN DISCUSSION

TEB Manager's Meeting

June 2023



UPCOMING MEETINGS

- TUG Meeting – June 21 – 10:00AM – Virtual
- Manager's Meeting – July 12 – 10:30PM – Virtual
- TANAAC Meeting – July 26 – 6:00PM - Virtual

Thank You!

