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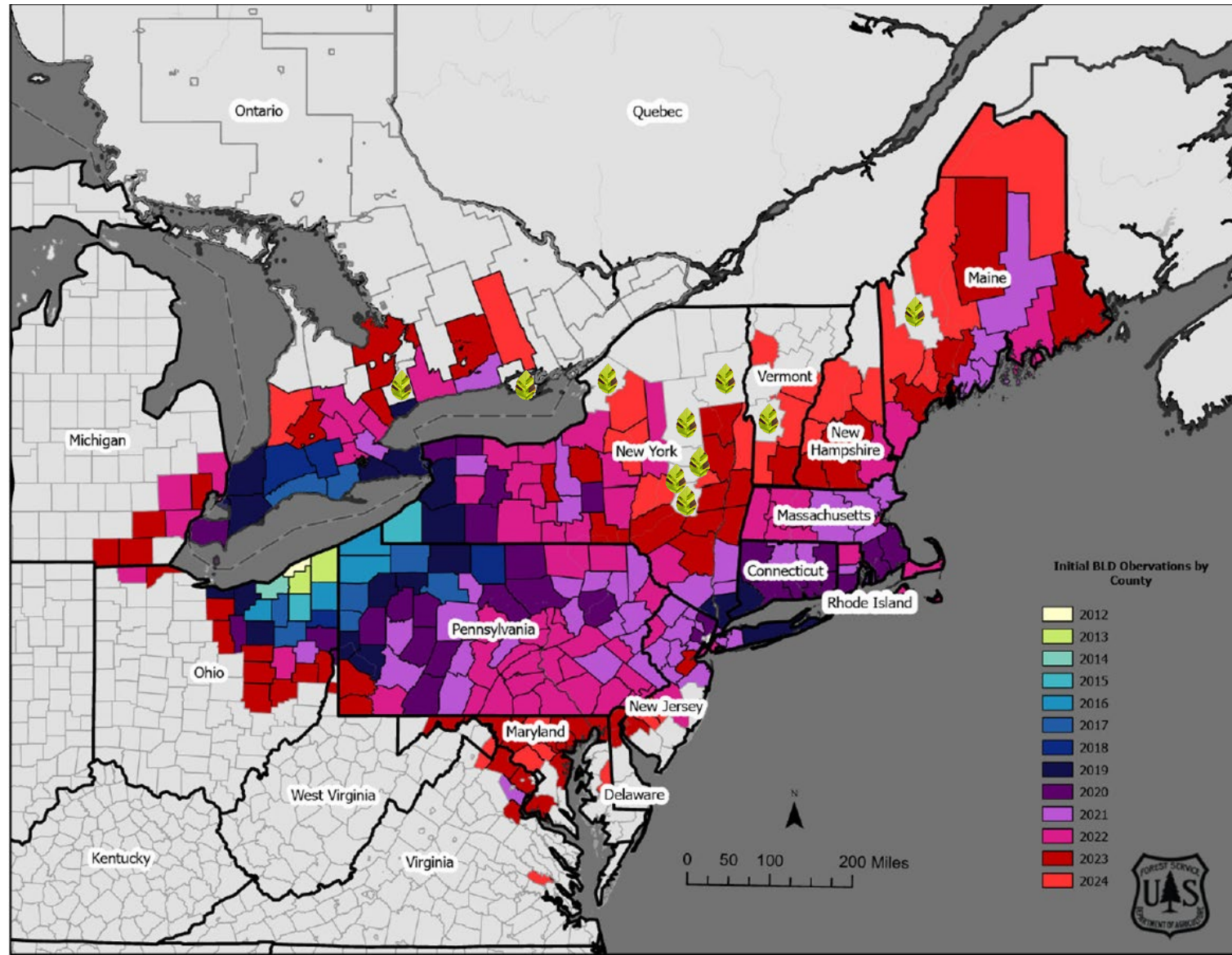
Beech Leaf Disease Monitoring and Mitigation via Silvicultural Treatments

Kelsey McLaughlin, Forest Pathologist
NYS DEC Forest Health Research Lab

Forest Ecosystem Monitoring Cooperative Meeting
November 20, 2025



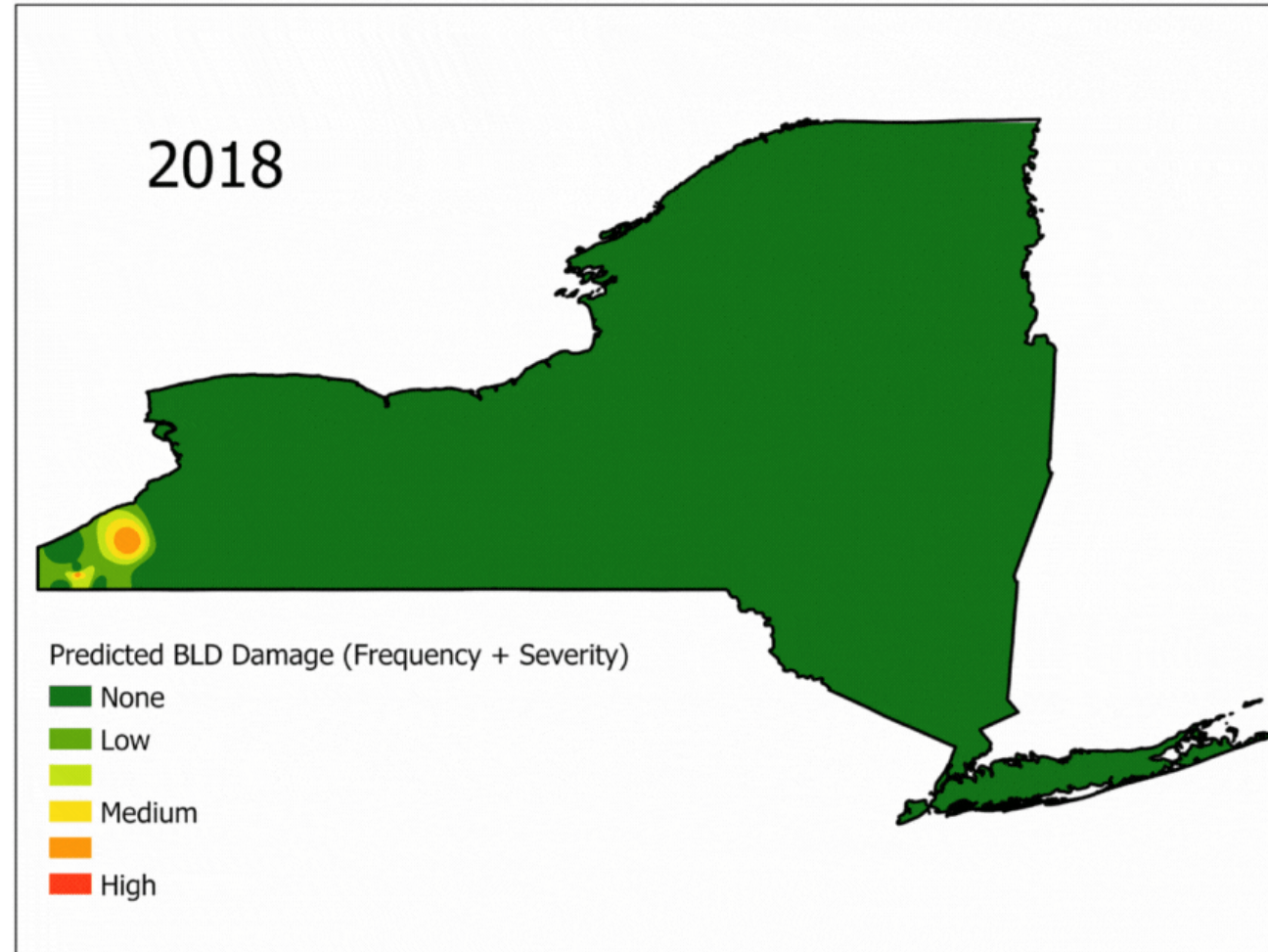
Distribution



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Statewide Severity Over Time



Tracking Local Spread

Spread of Beech Leaf Disease, 2020 - 2022 Kennedy State Forest, Cortland County, New York



12/11/2023 NYS DEC, Bureau of Invasive Species and Ecosystem Health

Expansion by Year

- 2020 (1.05 ac.)
- 2021 (4.75 ac.)
- 2022 (15.42 ac.)

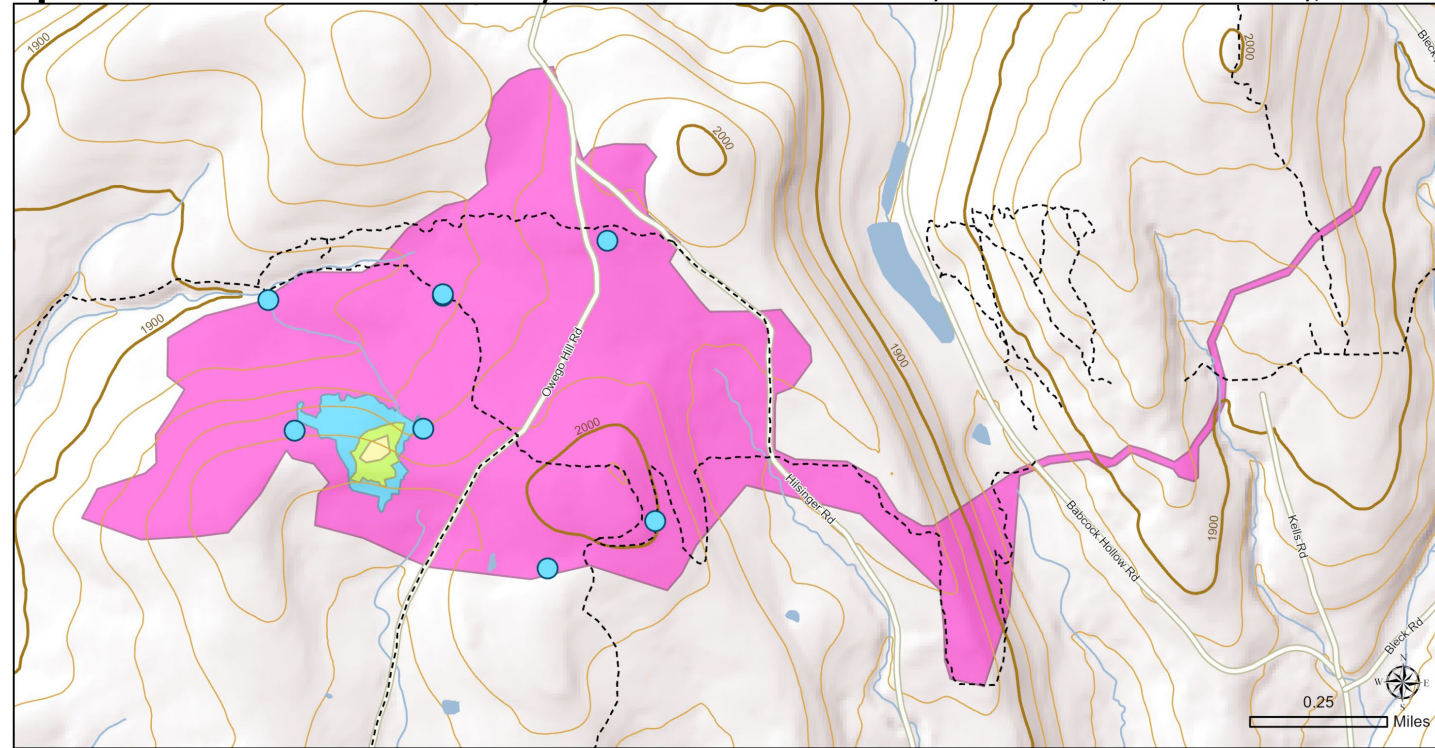
● 2022 Satellite Observations

- Streams
- Waterbodies
- Roads
- Trails
- 20 ft. contours
- 100 ft. contours



Tracking Local Spread

Spread of Beech Leaf Disease, 2020 - 2023 Kennedy State Forest, Cortland County, New York



12/11/2023 NYS DEC, Bureau of Invasive Species and Ecosystem Health

Expansion by Year

- 2020 (1.05 ac.)
- 2021 (4.75 ac.)
- 2022 (15.42 ac.)
- 2023 (466.57 ac.)

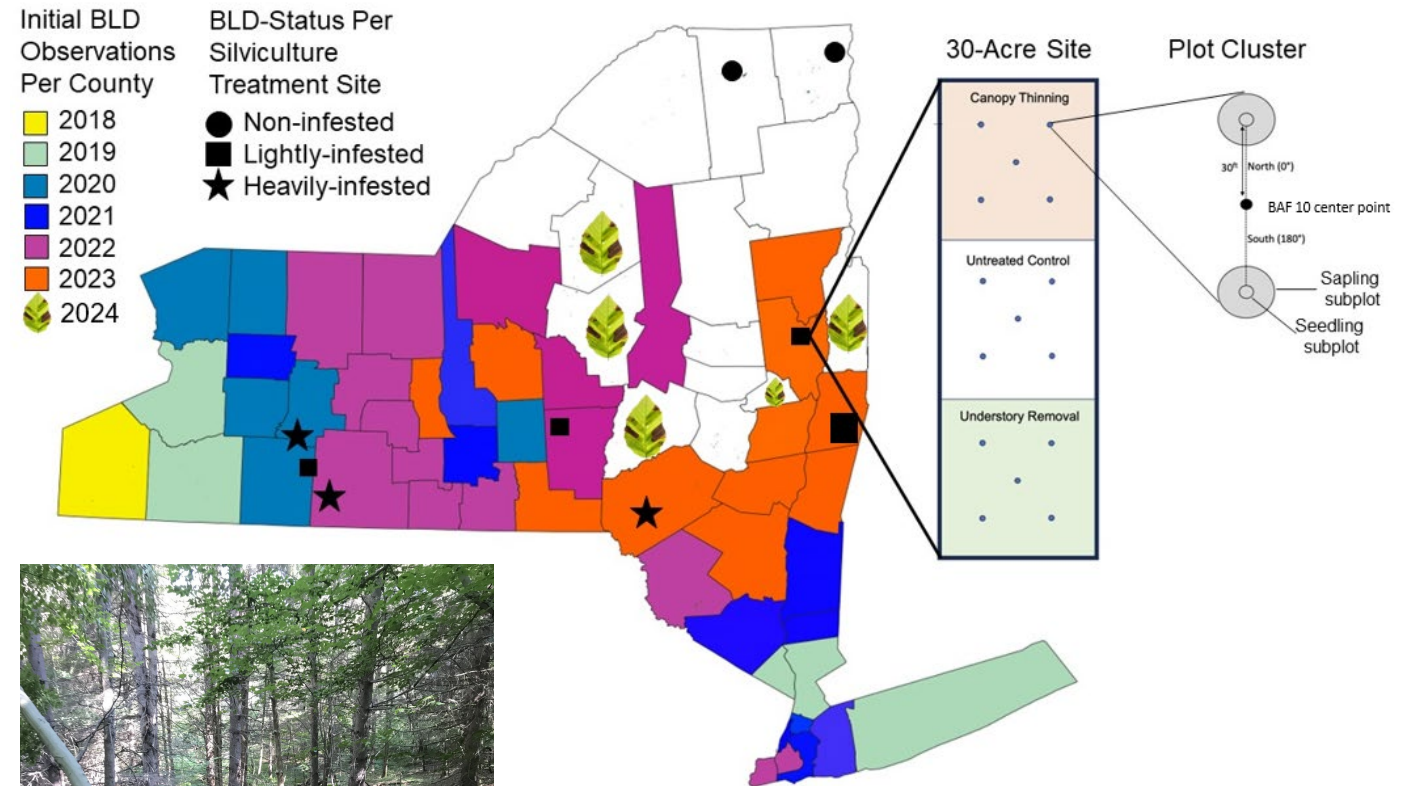
● 2022 Satellite Observations

- Streams
- Waterbodies
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- Trails
- 20 ft. contours
- 100 ft. contours



Silviculture

- 9 sites across NY, with varying levels of BLD infestation
- Canopy thinning, understory removal, and control
- Pretreatment data collected, treatments implemented, Year 0 data collected this year
- Some bumps in the road, but we soldier on!

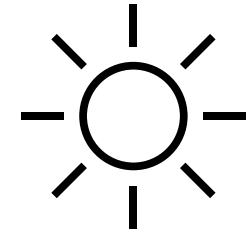


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The “Ladder”



Canopy Thinning- “Dry the Ladder”



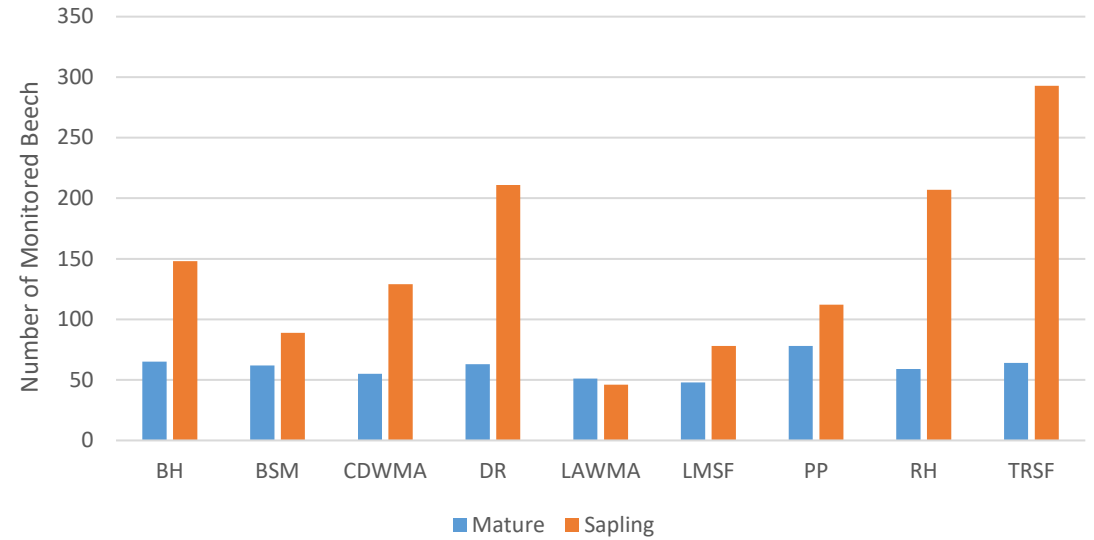
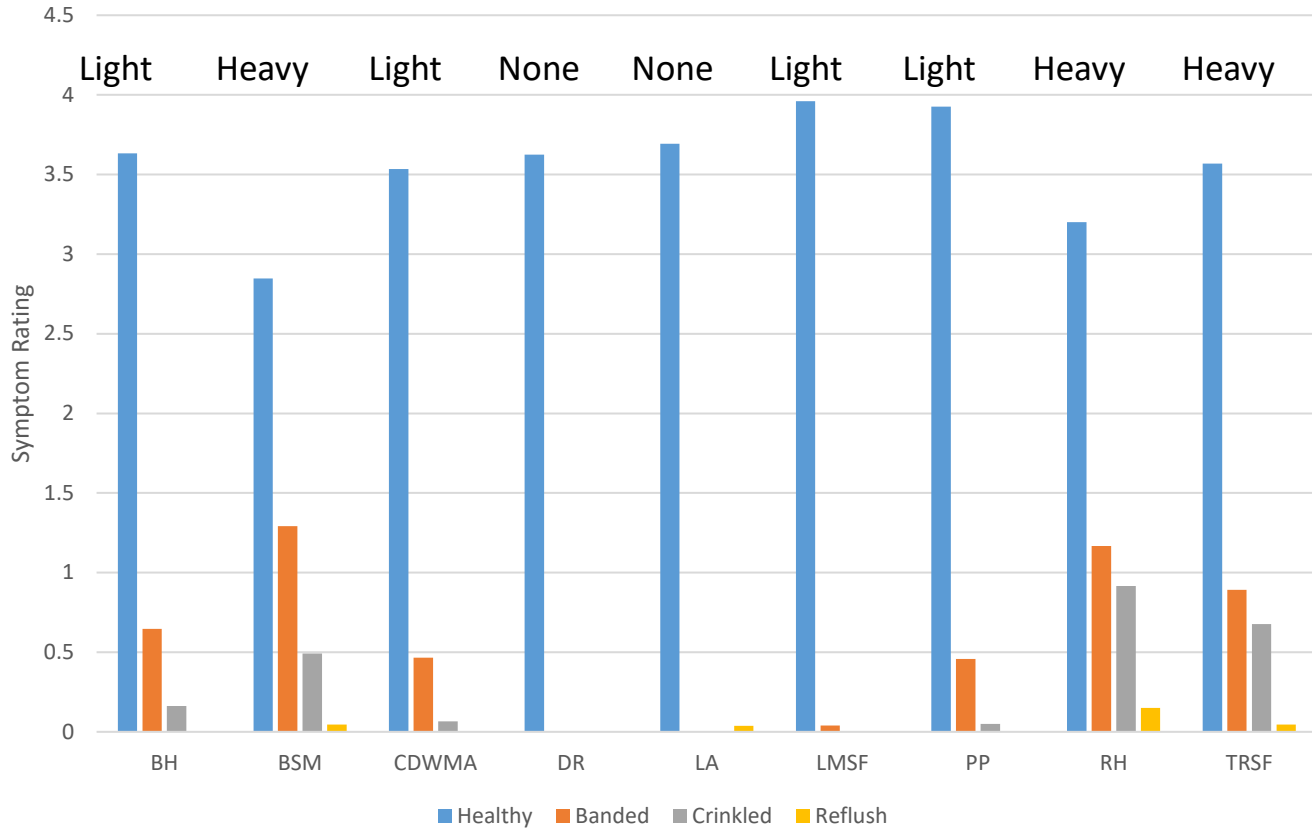
Understory Removal- “Remove the Ladder”



Silviculture Experiment Thinnings



BLD Symptoms

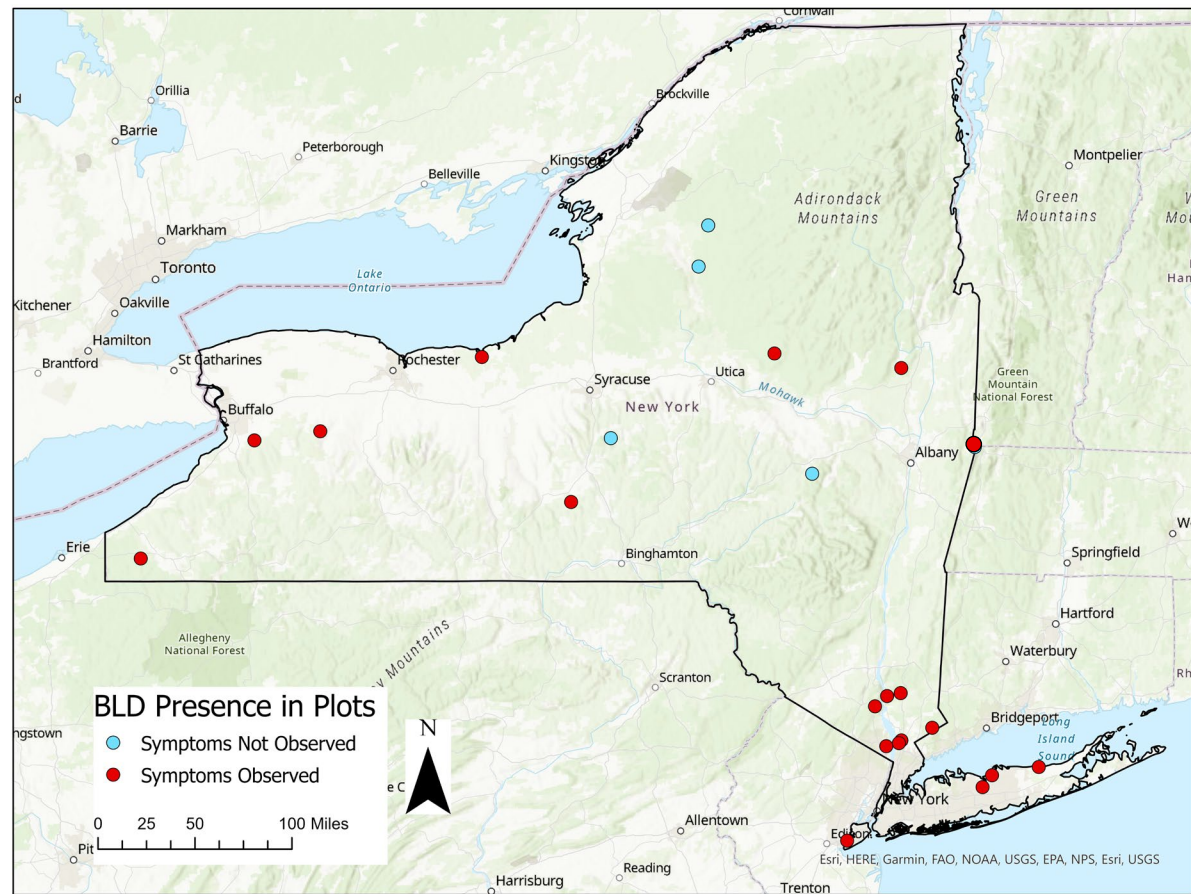
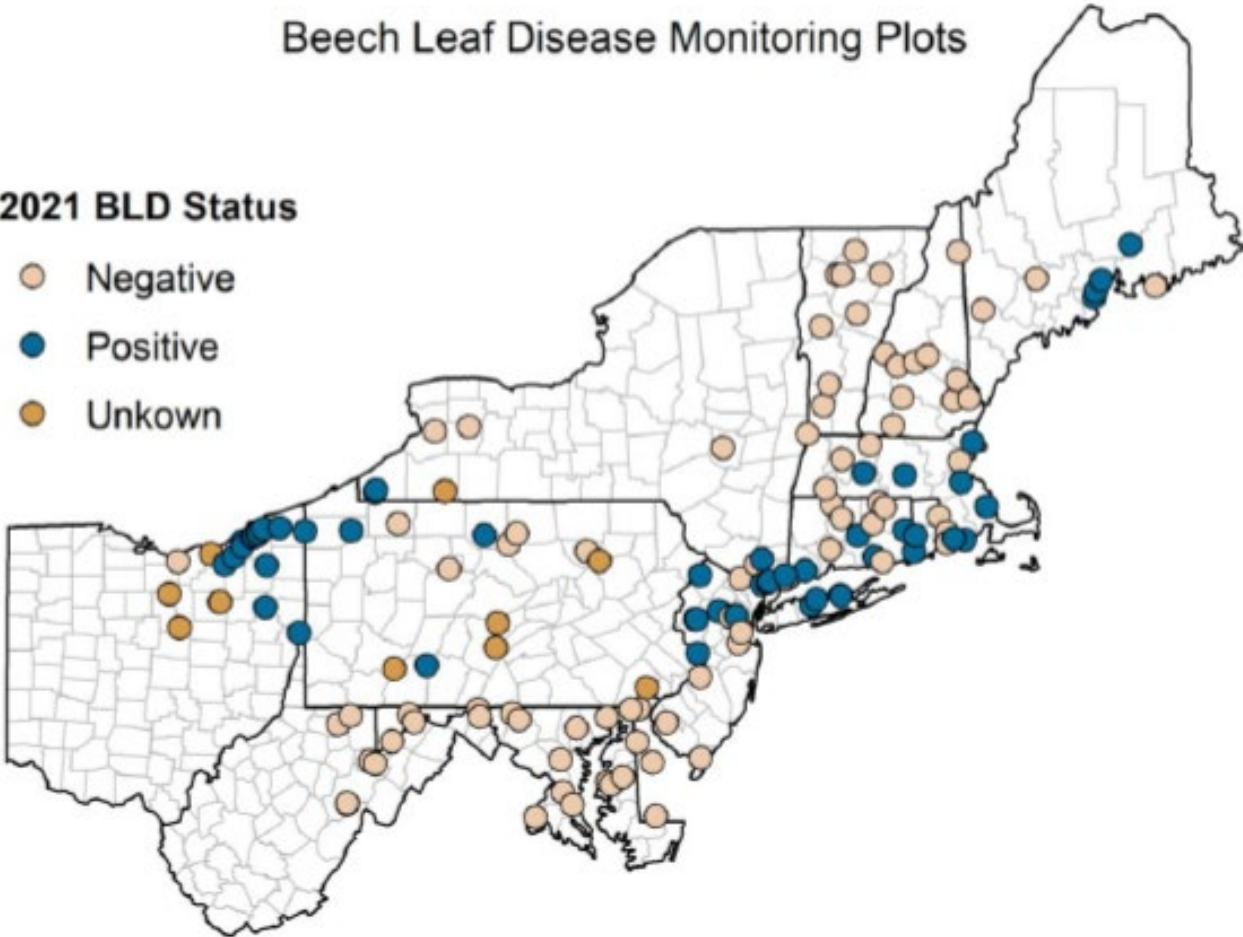


Plot Monitoring

Beech Leaf Disease Monitoring Plots

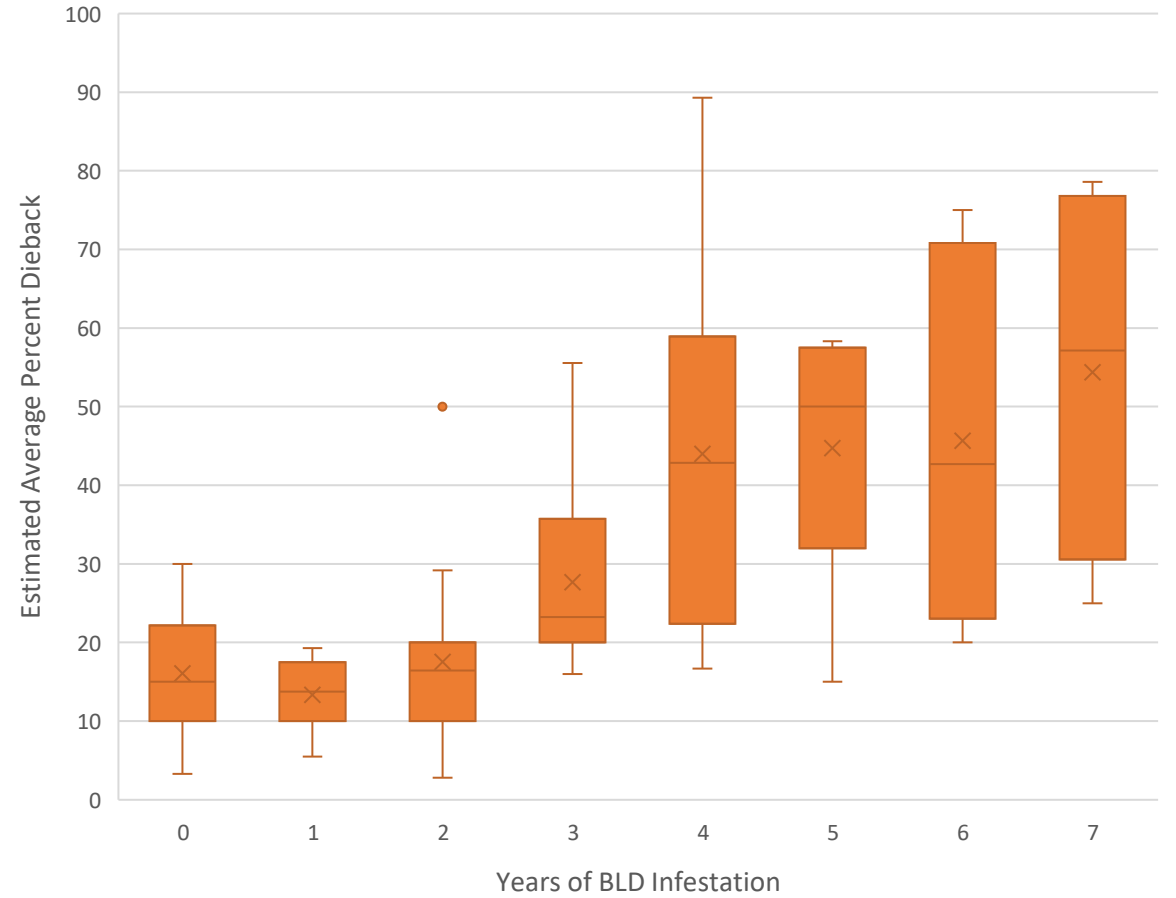
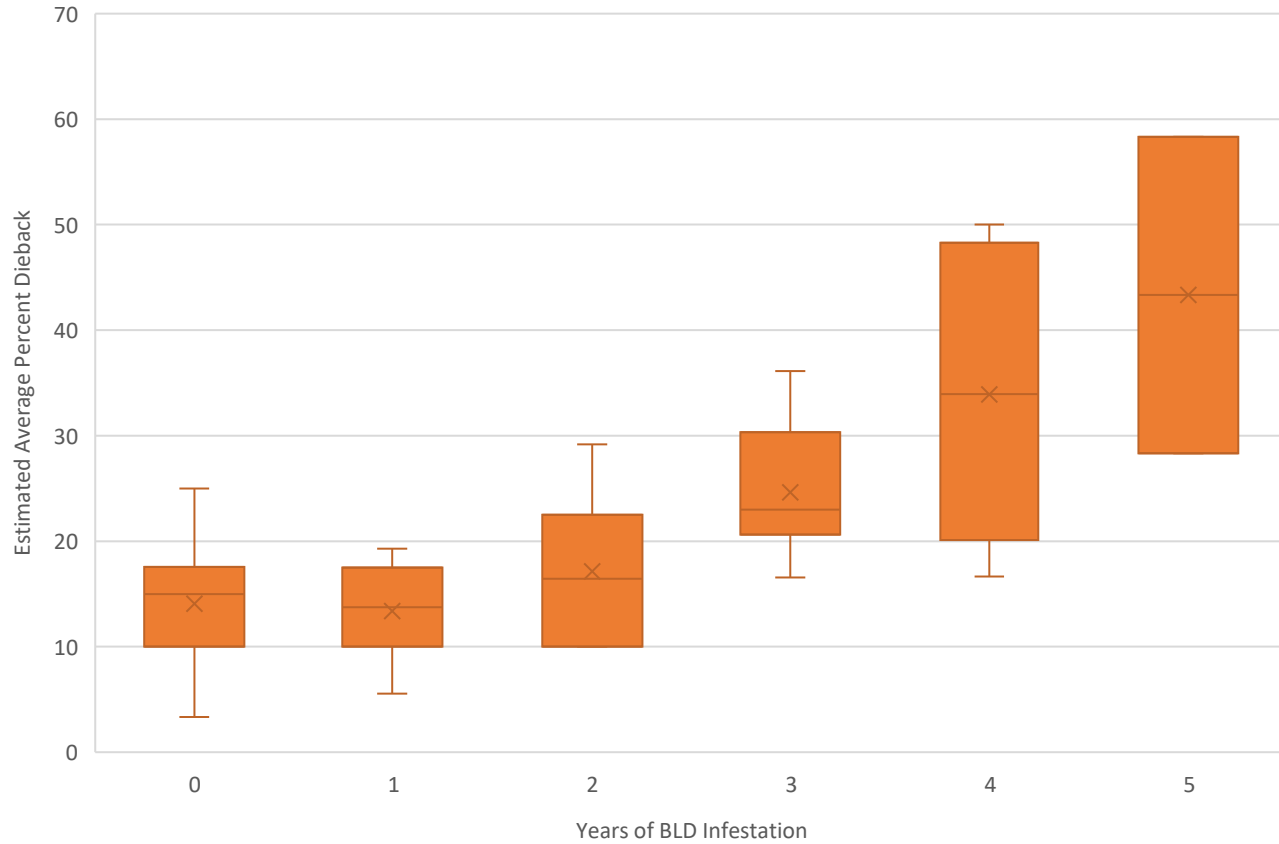
2021 BLD Status

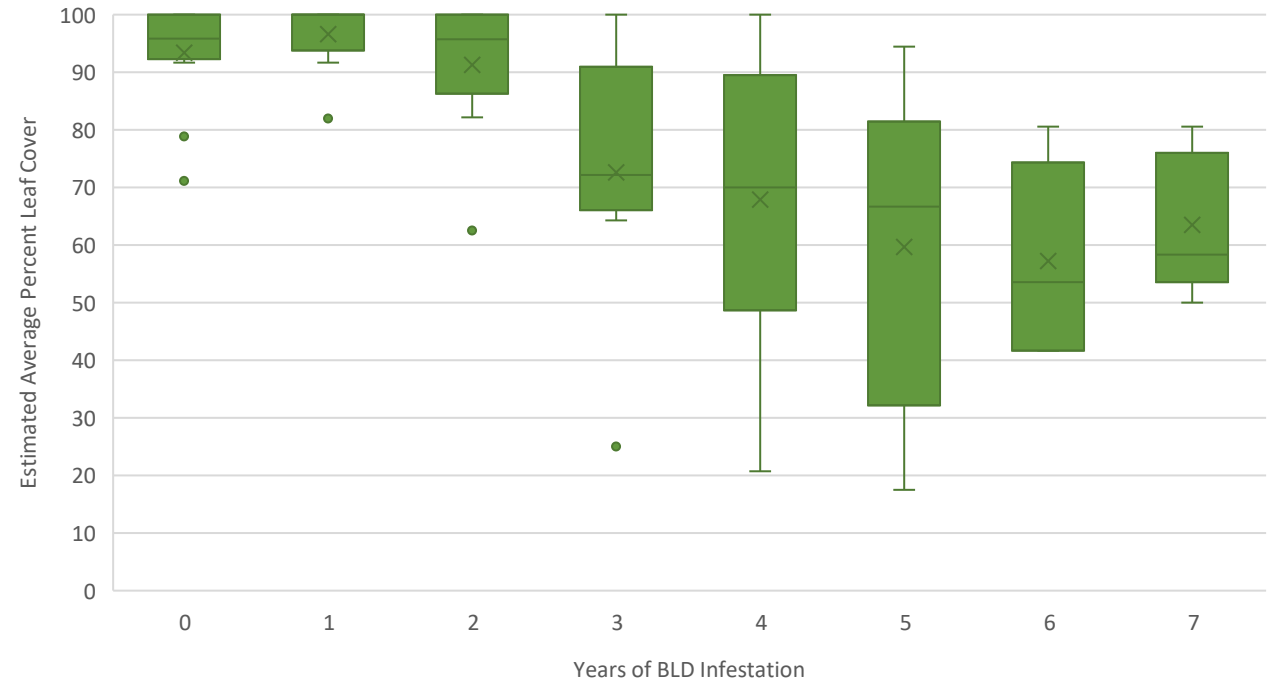
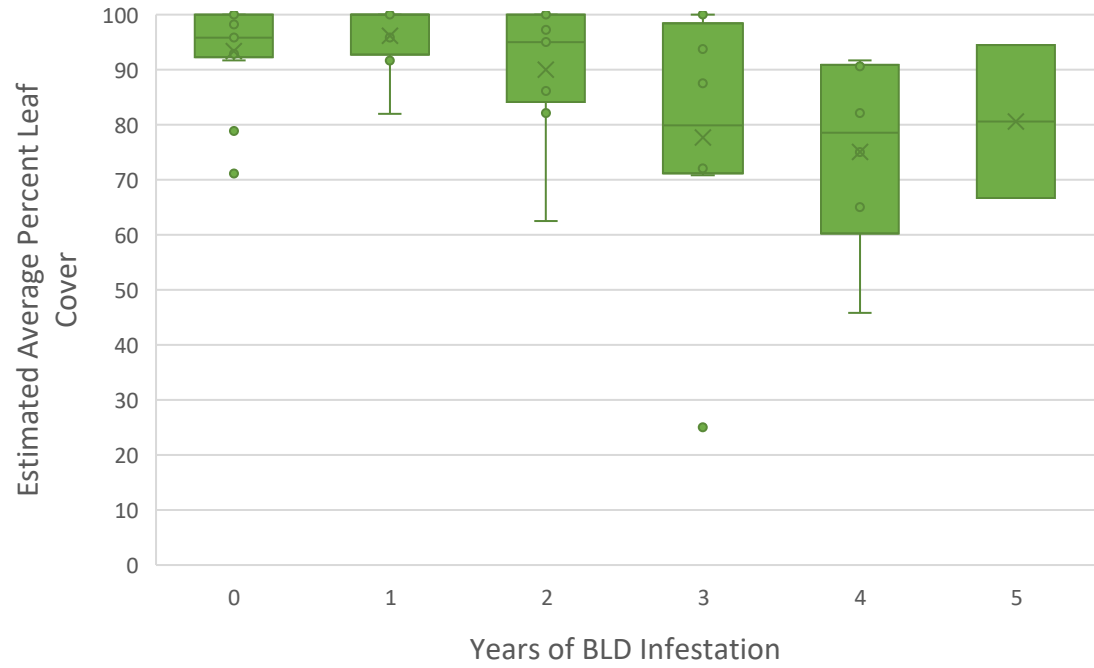
- Negative
- Positive
- Unkown



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BLD Monitoring Plots





Mortality



	Plot ID	Tag	DBH (in)	Other pests/ remarks	Year	Years with BLD
1	NYSU05	1	11.5		2022	1+
2	NYSU05	5	4.8	circular exit holes	2024	3+
3	NYSU05	8	22.7	Double trunk	2022	1+
4	NYSU05	6	4.8		2023	2+
5	NYSA01	9401	13.2		2023	?
6	NYWE04	1102	13.8		2024	3+
7	NYHE01	9485	6.3	orange fungus on bark	2024	0
8	NYOR01	9103	5.3		2025	3
9	NYWE02	Sapling	1.8		2021	0
10	NYSC01	Sapling	1.4		2022	0
11	NYSU05	Sapling	0.5	other canker	2022	0
12	NYSU05	Sapling	0.4	main branch breakage, sunken canker	2022	?
13	NYSU05	Sapling	0.5		2023	?
14	NYPU02	Sapling	1		2025	3+
15	NYSU05	Sapling	1.1		2025	3+



Thank You

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