2025 Rouge River Watershed Frog and Toad Survey

Friends of the Rouge
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The Rouge River Watershed Frog and Toad Survey is a volunteer listening survey that has been coordinated by Friends of the Rouge since 1998. Volunteers are trained to recognize local frog and toad breeding calls and survey quarter-square-mile blocks within the Rouge River watershed from March through July. The purpose of the survey is to collect baseline data on the distribution of frogs and toads within the watershed as well as to give residents of an urbanizing area a positive experience with their local natural areas.

Summary of Volunteer Effort

The 2025 training workshop was held at the Livonia Civic Center Library on Saturday February 22, 2025. There were 78 attendees. Former surveyor Kathy Ableson presented the Froggyvoice app she designed to help people learn Michigan frog and toad breeding calls. Veteran surveyor Scot Martin provided his advice and experience. Scot has been surveying on and off since 2009! Education and Monitoring Coordinator Sam Davis taught participants how to use Survey123 to submit data.

A total of 149 people signed up to survey an area for frogs and toads: 107 veteran surveyors and 42 new surveyors. To support the surveyors and to provide an opportunity to practice listening skills, two group listens were held. The first was held on May 2rd at West Bloomfield Woods Nature Preserve, co-sponsored by West Bloomfield Parks and Recreation. The second was held on June 3rd at Rotary Park in Livonia and had 11 attendees.

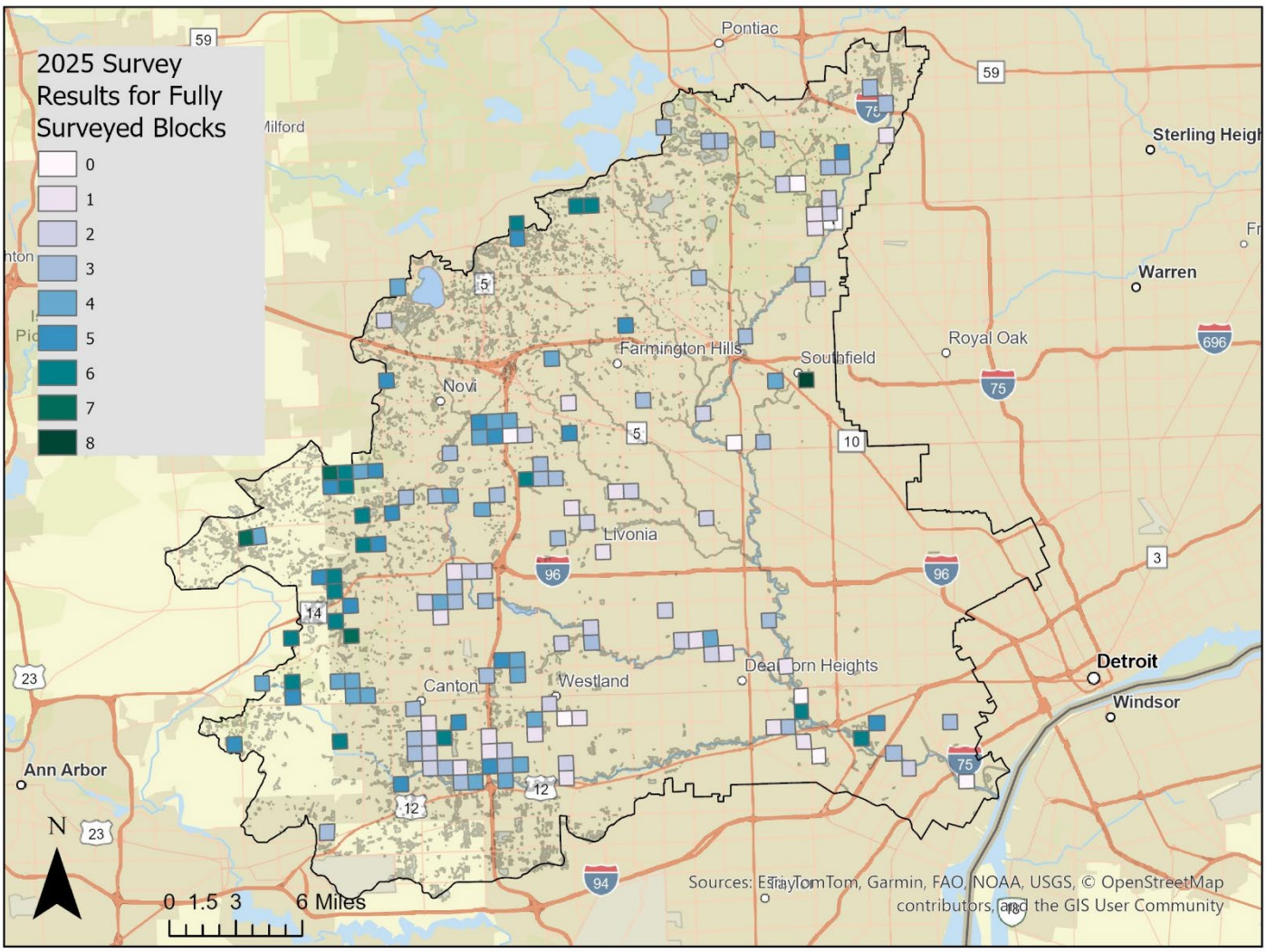
A total of 202 survey blocks were assigned. Data was submitted for 154 blocks. More of the data is now coming in via the Survey123 app. Interns assisted Friends of the Rouge in entering data from paper and electronic forms into the app.

Funding for the 2025 survey was provided by the Detroit Zoo, Bell's Brewery, the Michigan Association of Environmental Professionals, the Livonia Community Foundation, and Walmart (Novi).

2025 Survey Results

Surveyors submitted data observations for 154 blocks. Of those 154 blocks surveyed this year, 137 (88%) were fully surveyed. To be considered fully surveyed, the block must have at least four observation dates, spread between March and July. With consistent observations, we can generalize that the surveyor was able to document all of the species calling within the block. We also received partial data for 17 blocks. Occasional observations for a block are useful in documenting that a species was calling in that block in 2025, but it is not enough observations to say that other species were not also found there.

Map 1: 2025 Survey Results-Number of Species Heard Per Block



For the 137 blocks that were fully surveyed, an average of 3.4 species was heard per block. Five fully surveyed blocks had no species calling. American toads (78%), green frogs (64%) and gray treefrogs (62%) were the most commonly heard species in 2025. Northern leopard frogs were the least commonly heard species (9%), followed by wood frogs (18%) and bullfrogs (20%). Wood frogs, chorus frogs, spring peepers, american toads and northern leopard frogs were all heard in fewer blocks than average for the species.

For each species, we looked at the trend over time in the percent of blocks in which they were heard (see Figure 1, Table 1 and Species Maps and Graphs). Overall, three early calling species (Wood Frog, Midland Chorus Frog, and Spring Peeper) seem to be declining while the later calling frogs seem to be increasing (with the exception of Northern Leopard Frogs which are decreasing). Similarly to 2024, the largest slope (trend increase) was for gray treefrogs which also had the highest R^2 value (Table 1). Gray treefrogs rely on forested wetlands which have been increasing in the watershed since 2001. There is a lot of variation year to year but it is alarming that the early calling species may be declining. Chaotic spring weather with a spring drought in 2023 and a cold spring in 2024 and 2025 may be affecting them more. We rely on surveyors to continue to collect this data so we can monitor these trends over time, keeping an eye out for these sensitive special creatures.

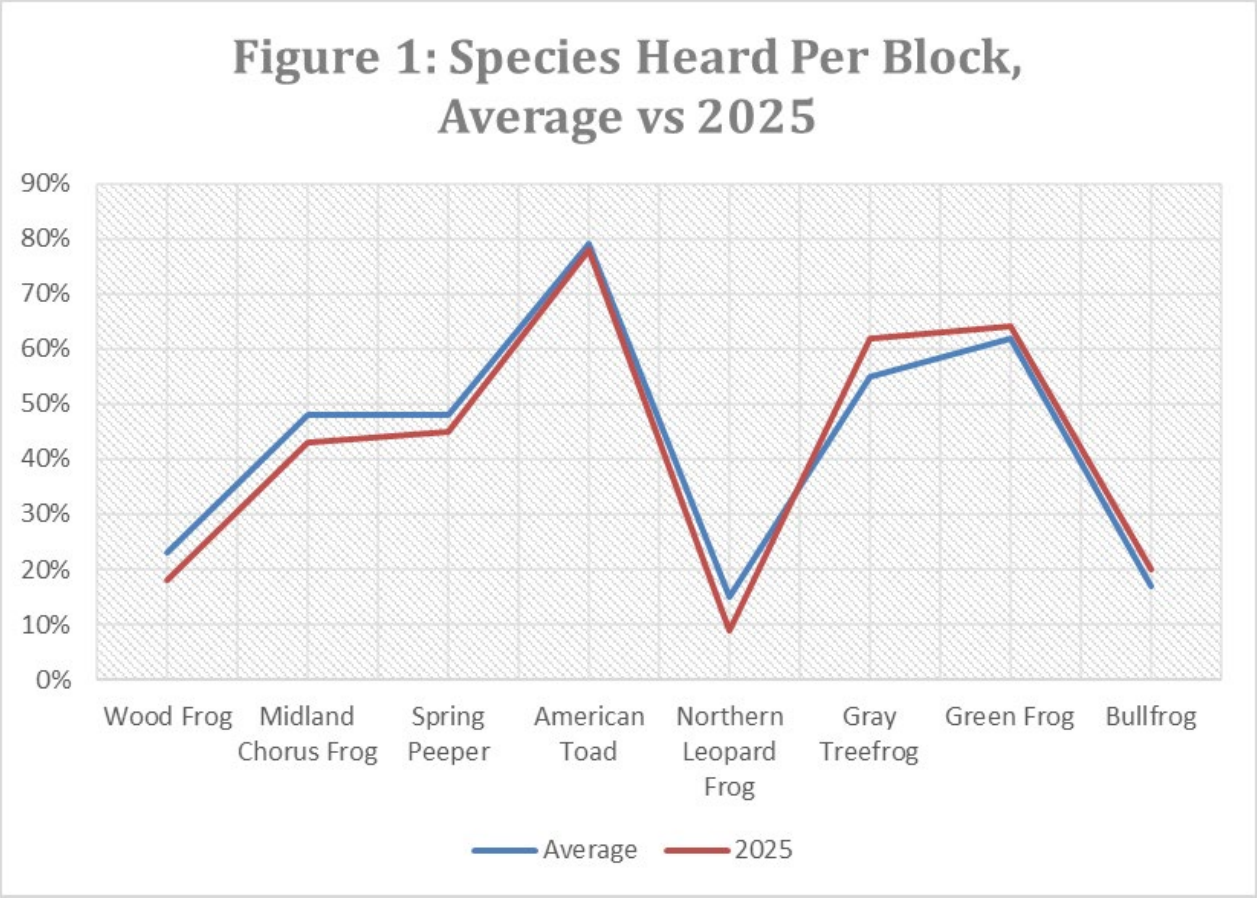
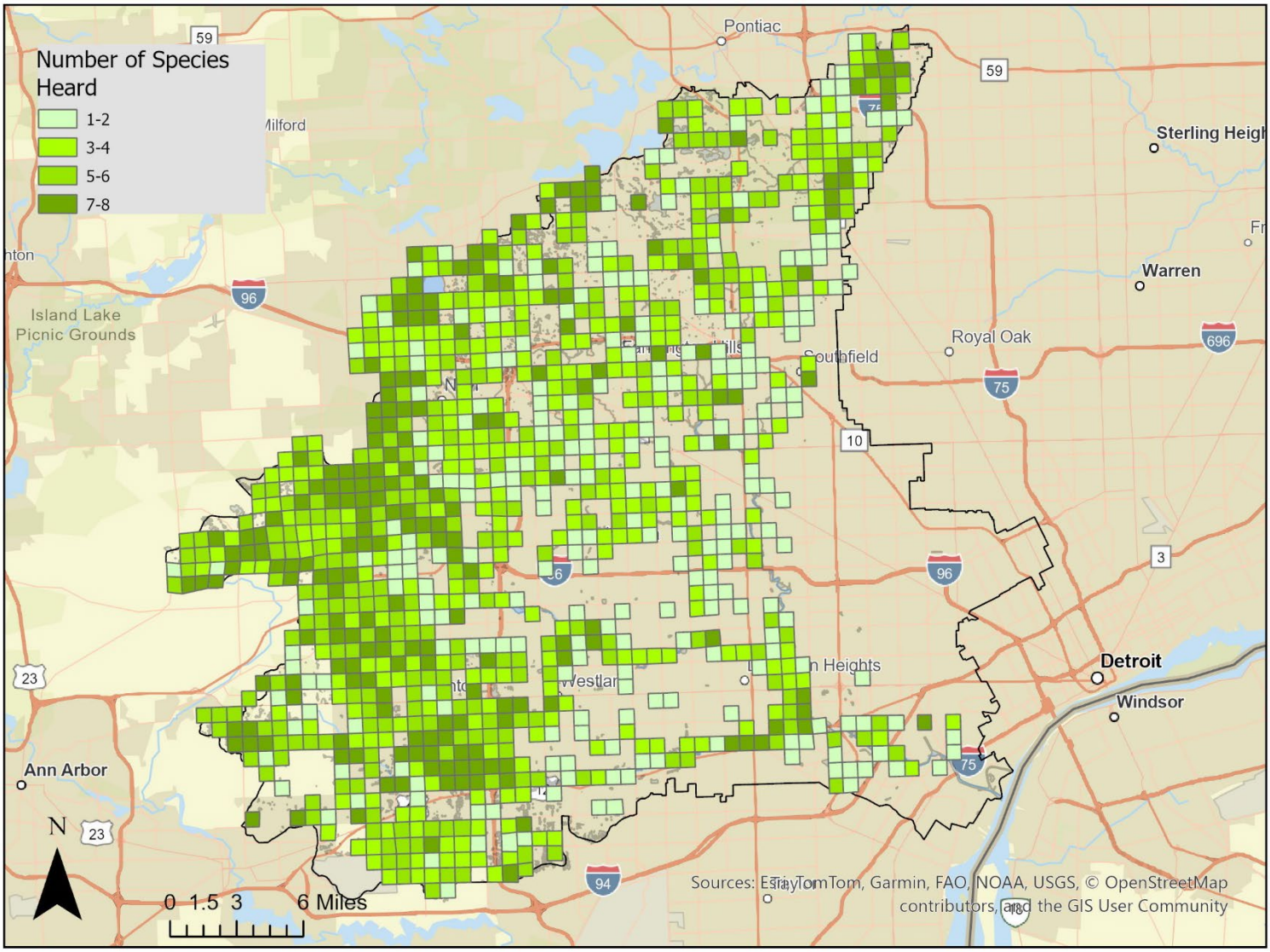


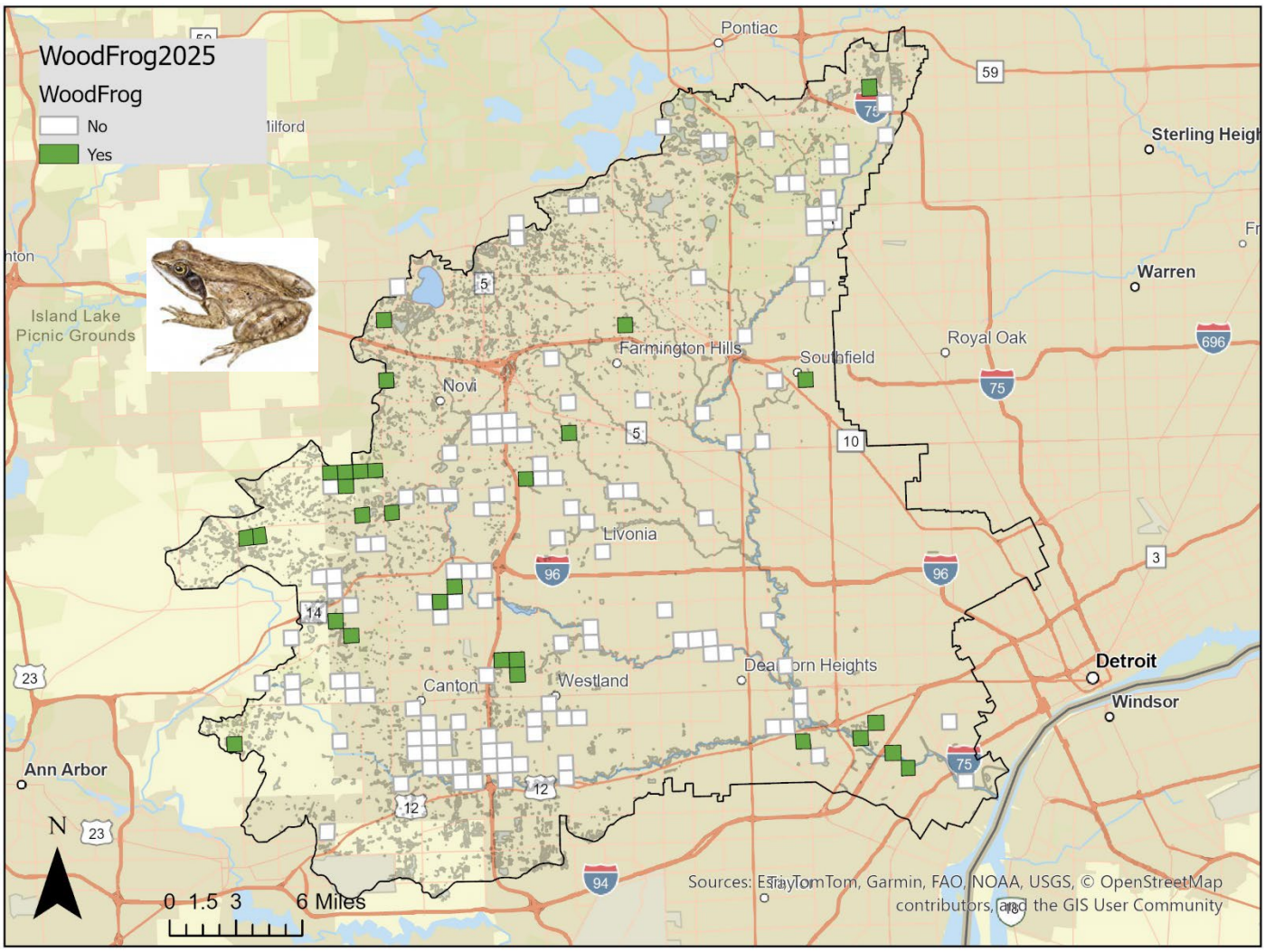
Table 1: Percentage of blocks in which each species was heard				
Species	**2025**	**Average**	**Trend**	**R^2**
Wood Frog	18%	23%	-0.2	0.09
Midland Chorus Frog	43%	48%	-0.3	0.16
Spring Peeper	45%	48%	-0.45	0.21
American Toad	78%	79%	0.53	0.22
Northern Leopard Frog	9%	15%	-0.06	0.008
Gray Treefrog	62%	55%	0.92	0.51
Green Frog	64%	62%	0.43	0.13
Bullfrog	20%	17%	0.46	0.39

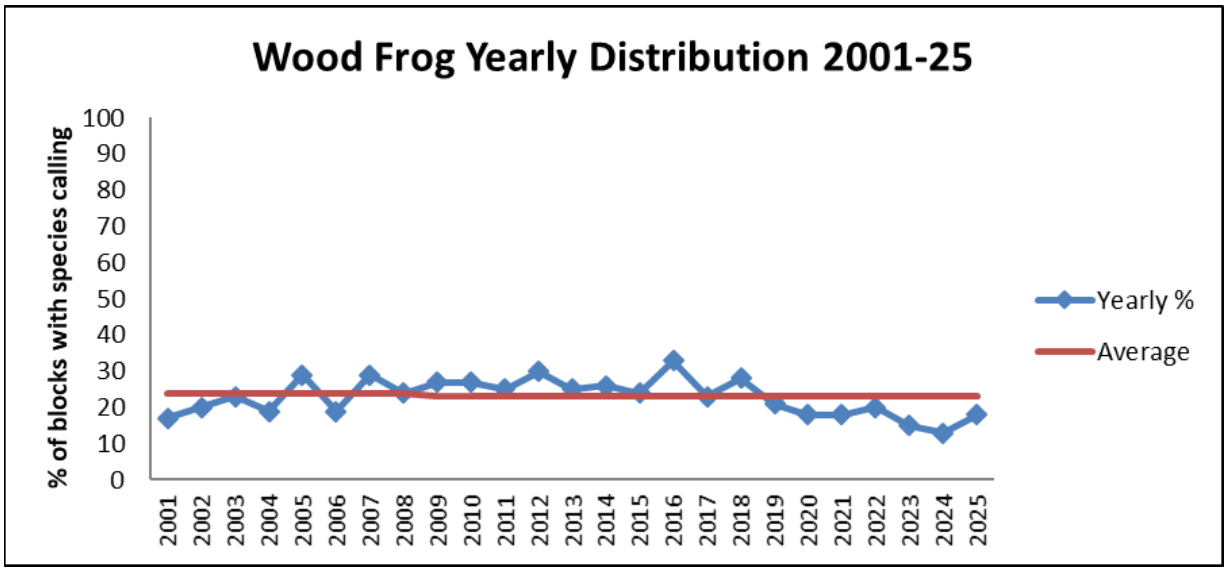
Species Maps & Graphs

Map 2: Cumulative Map Showing Total Number of Species Heard per Block, 1998-2025

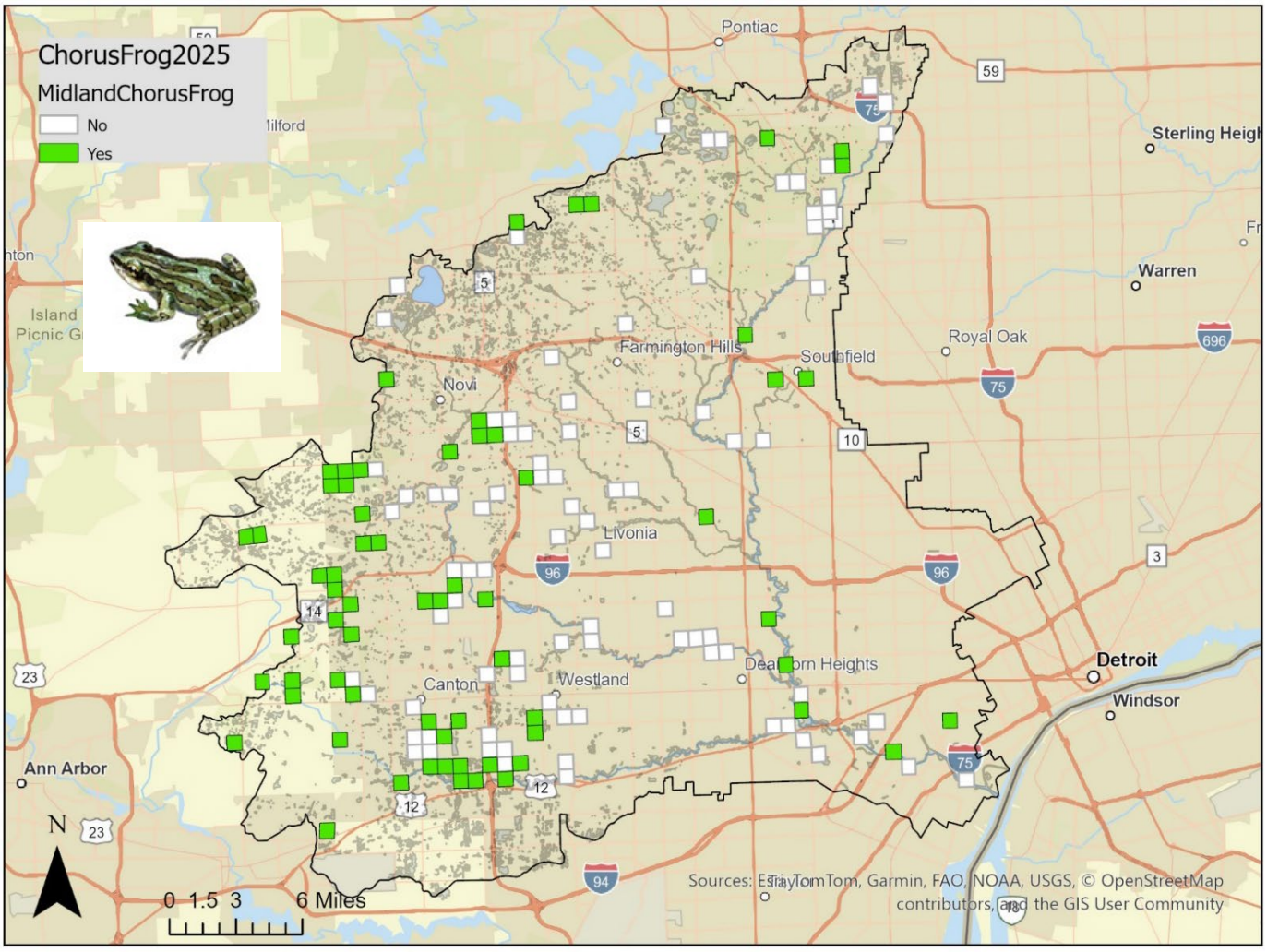


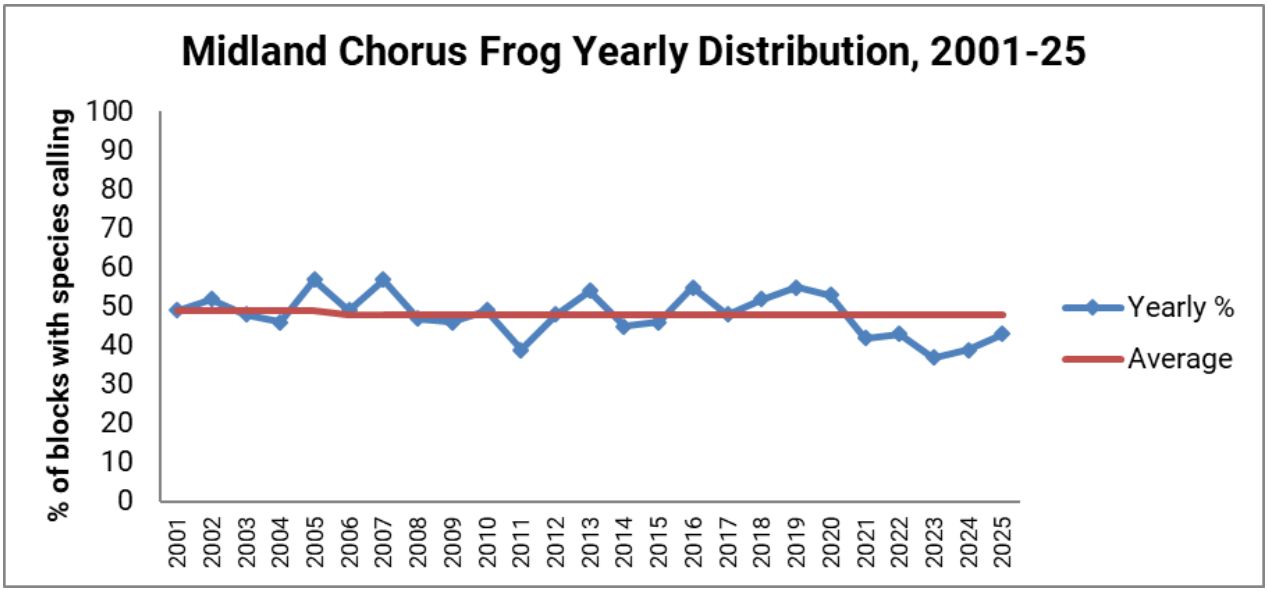
Map 3: Wood Frog (*Rana sylvatica*)



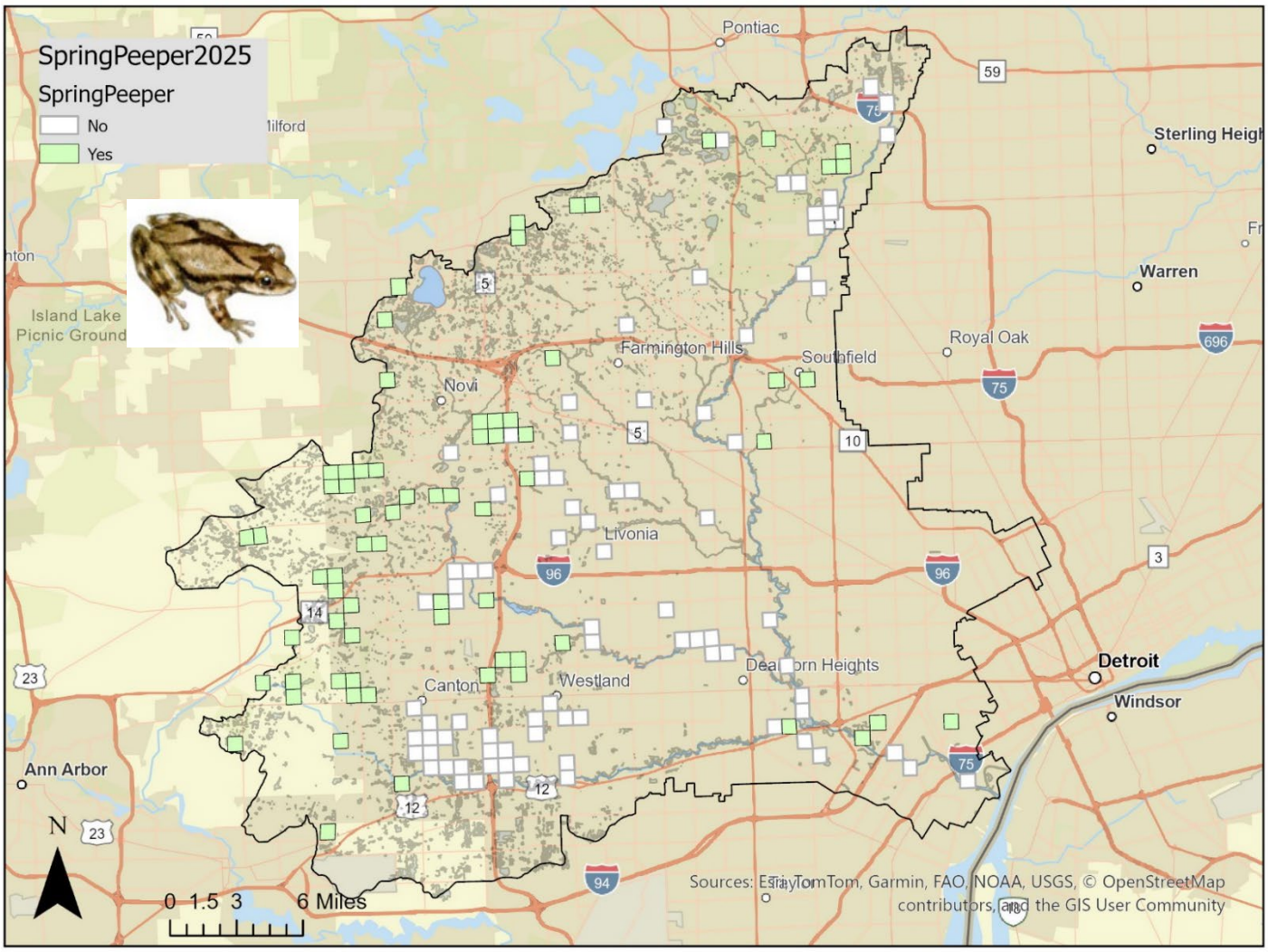


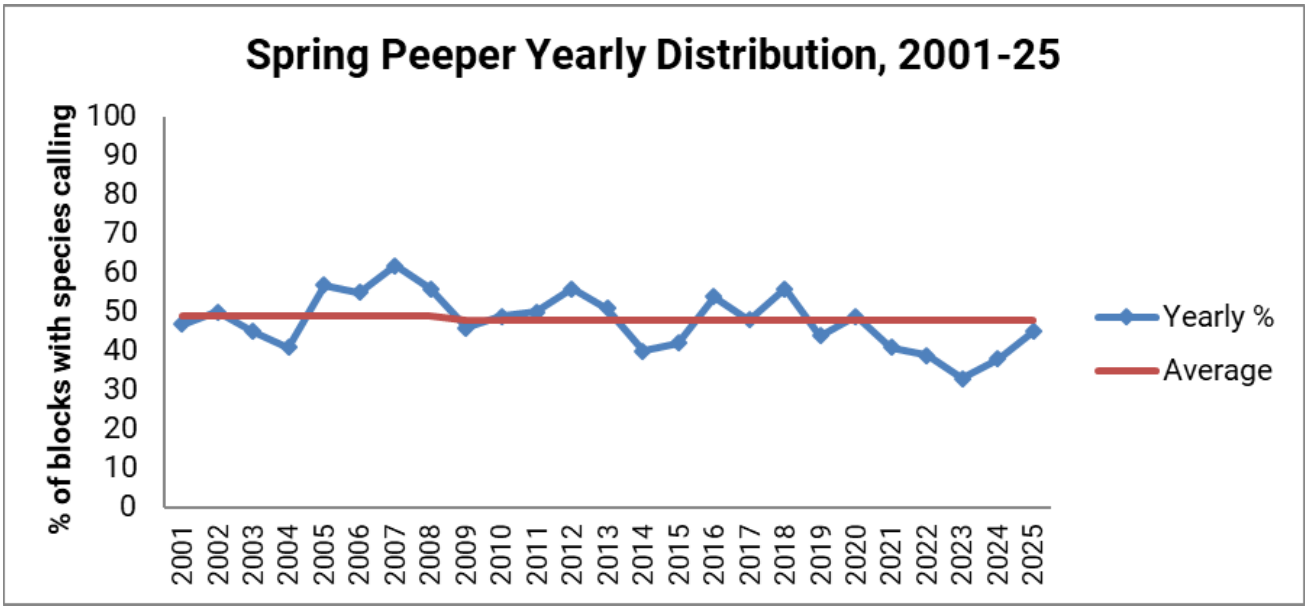
Map 4: Midland Chorus Frog (*Pseudacris triseriata*)



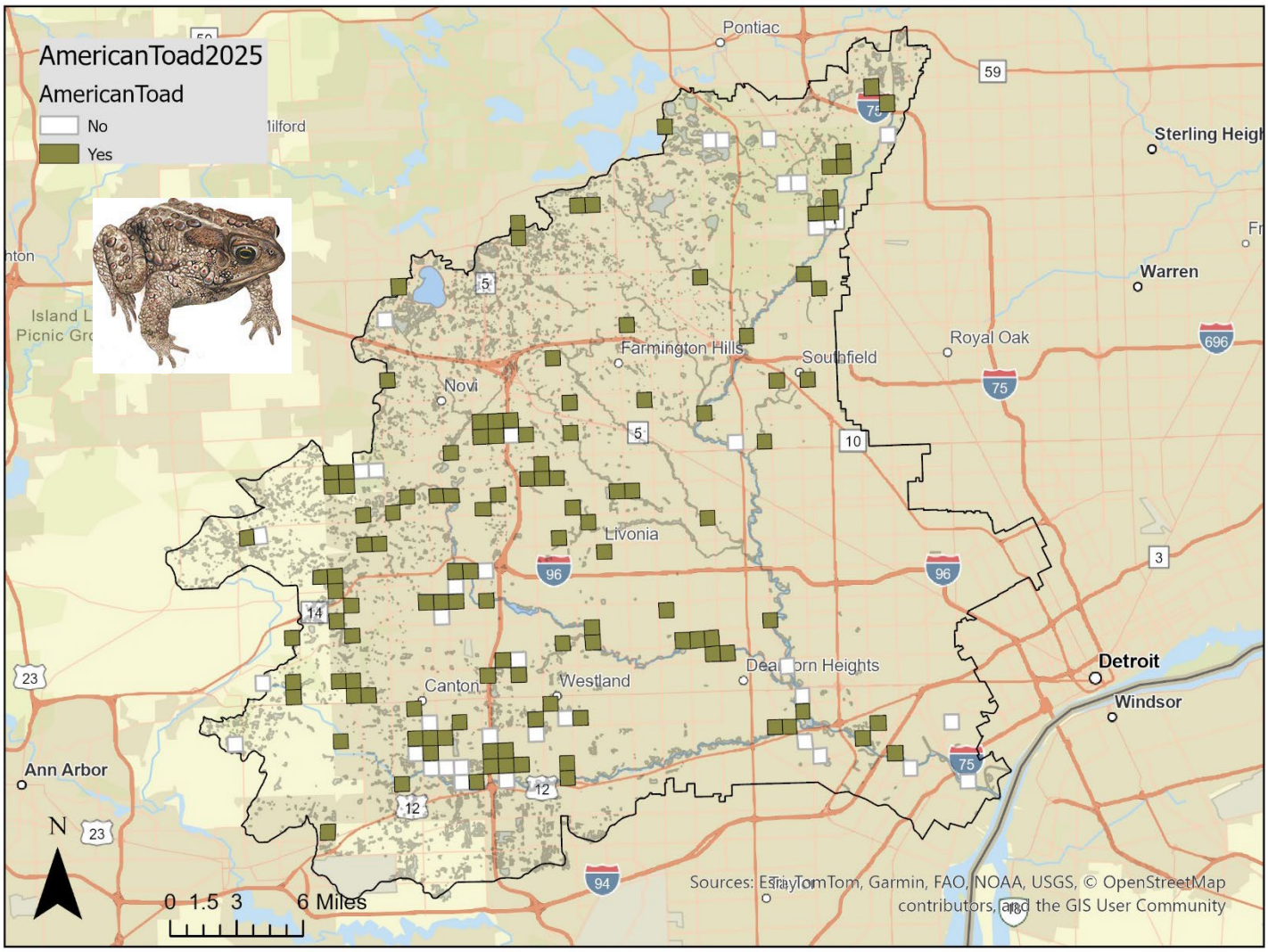


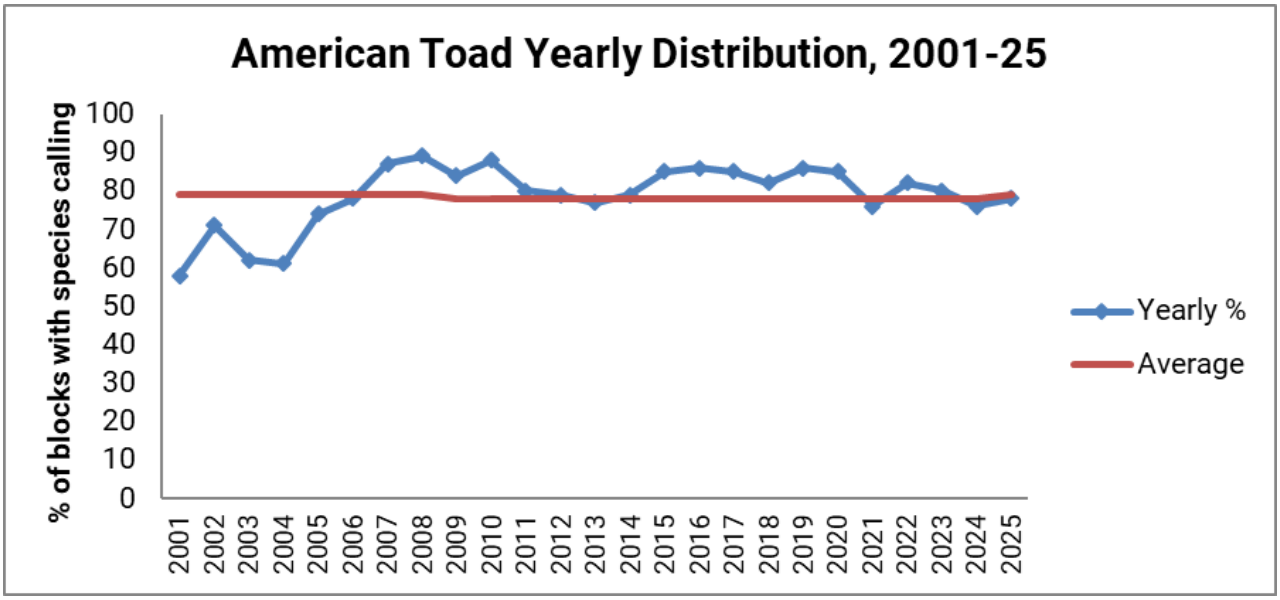
Map 5: Spring Peeper (*Pseudacris crucifer*)



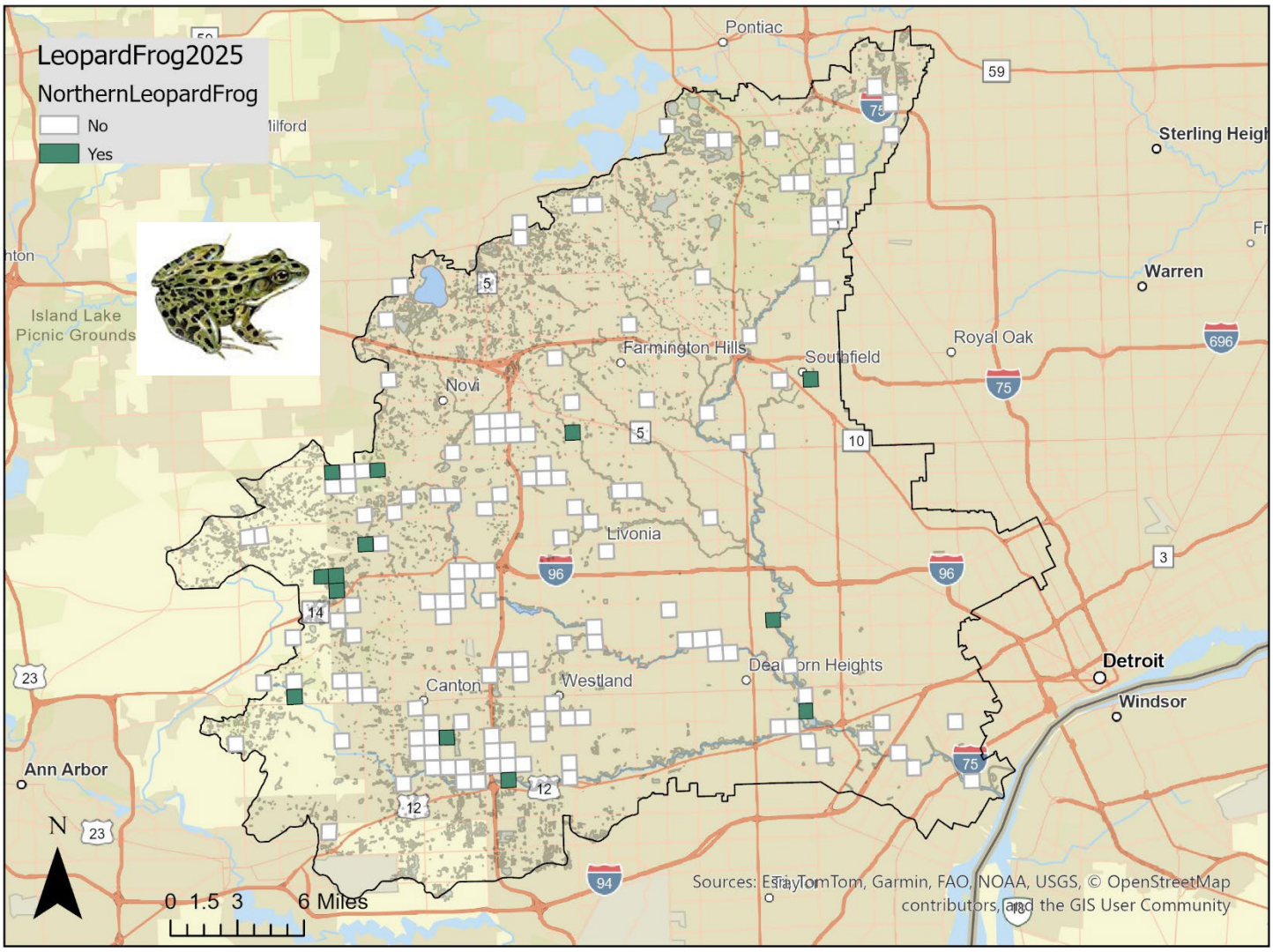


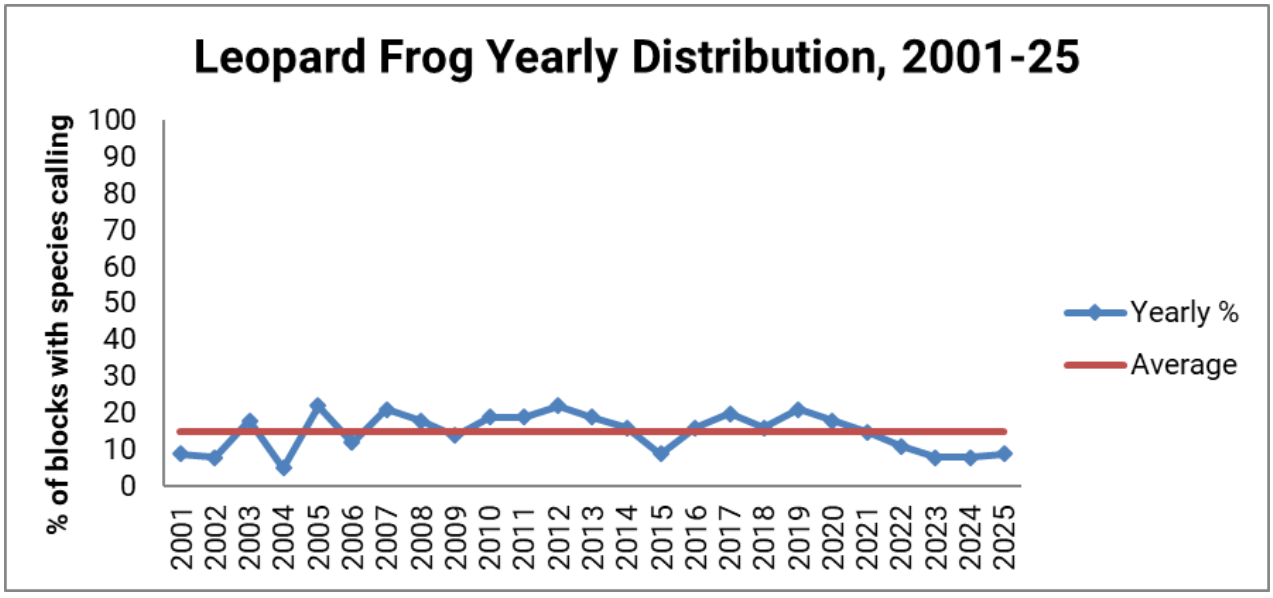
Map 6: American Toad (*Bufo americanus*)



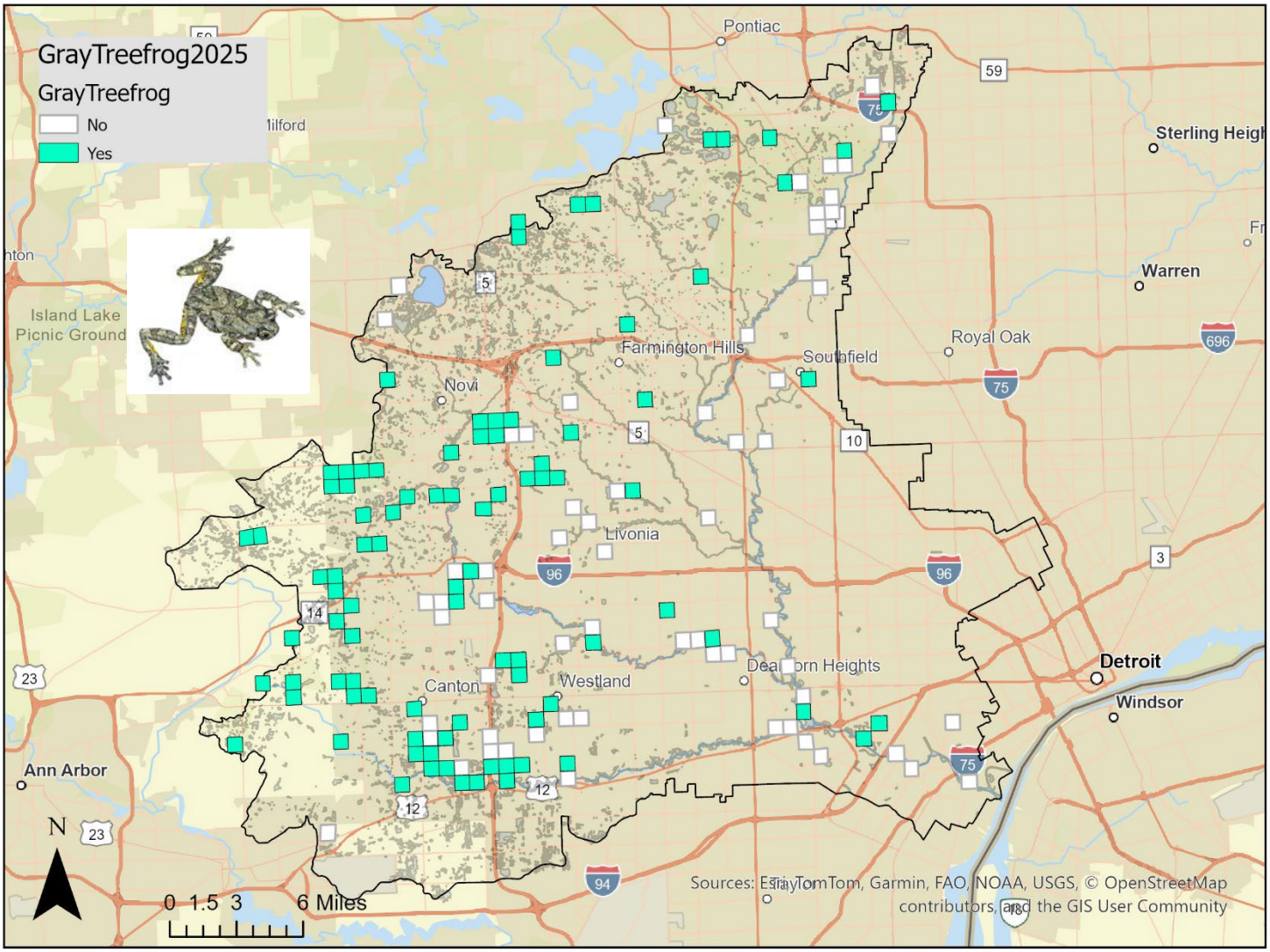


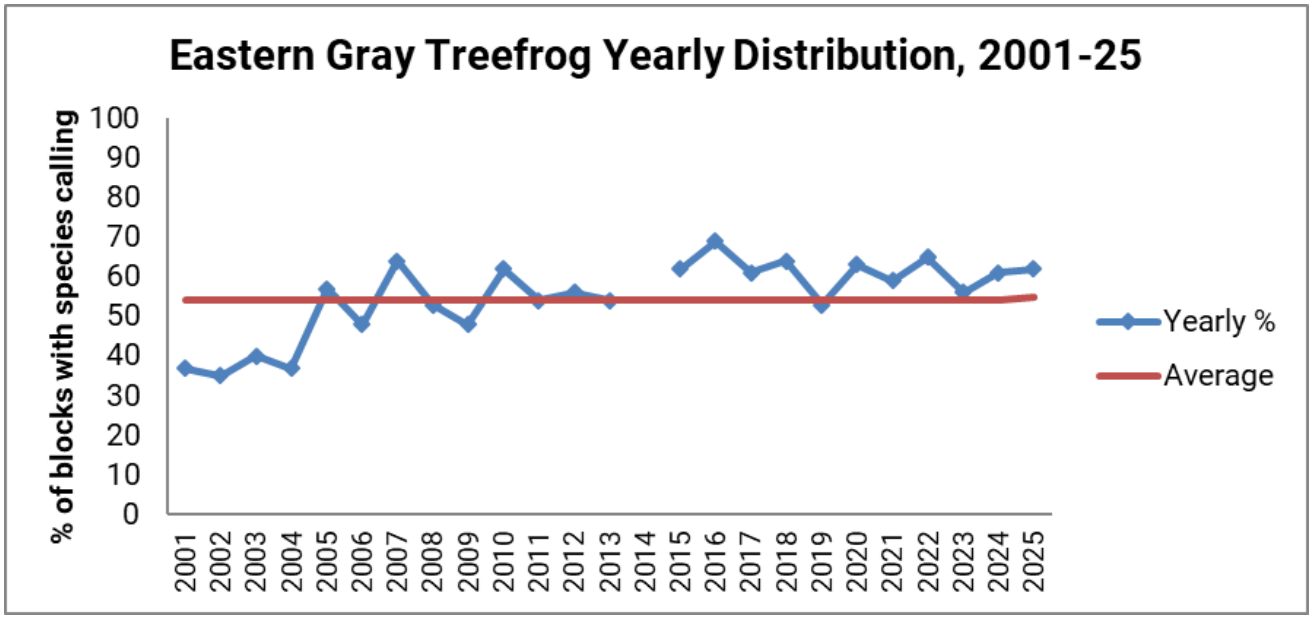
Map 7: Northern Leopard Frog (*Rana pipiens)*



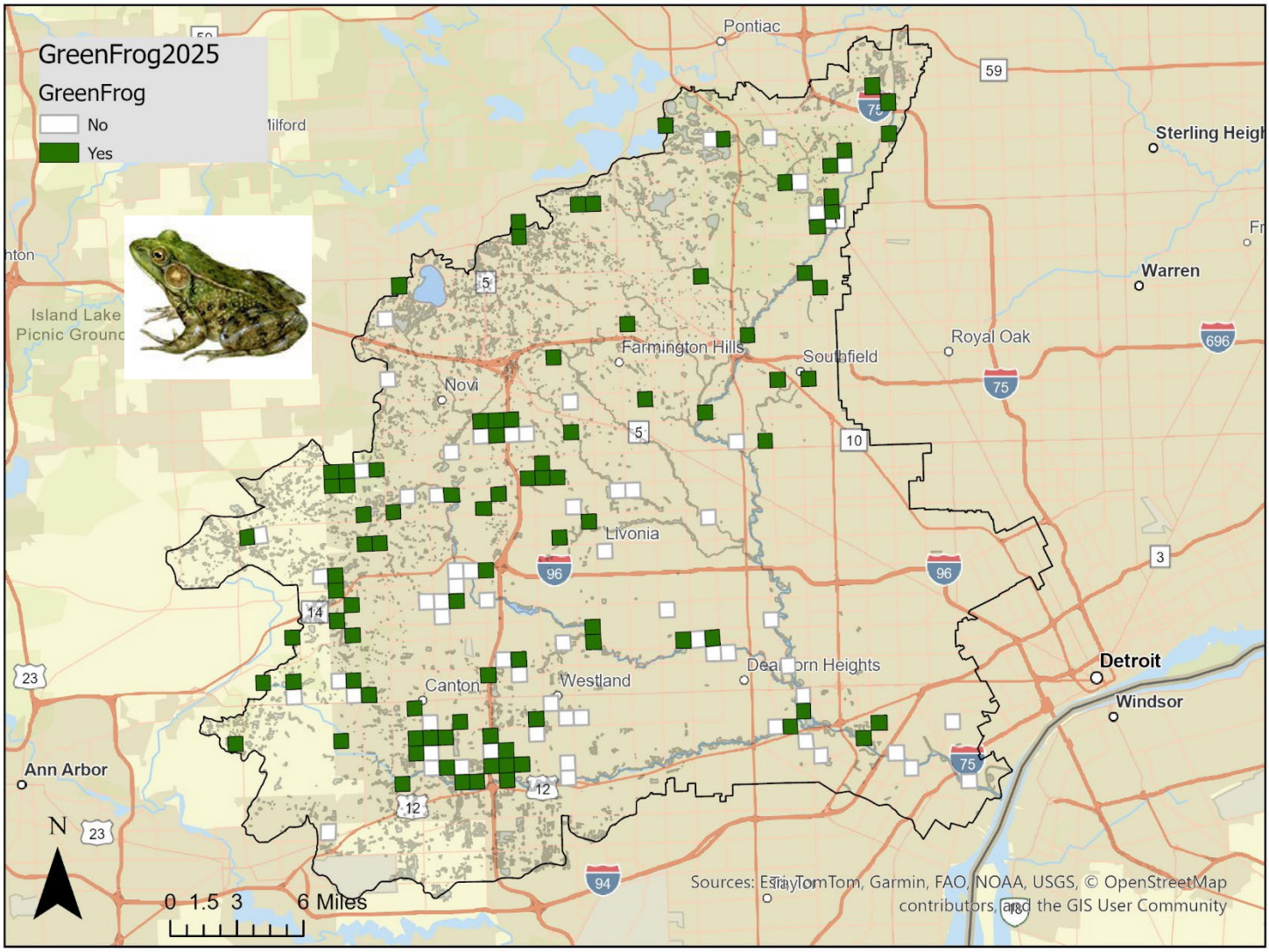


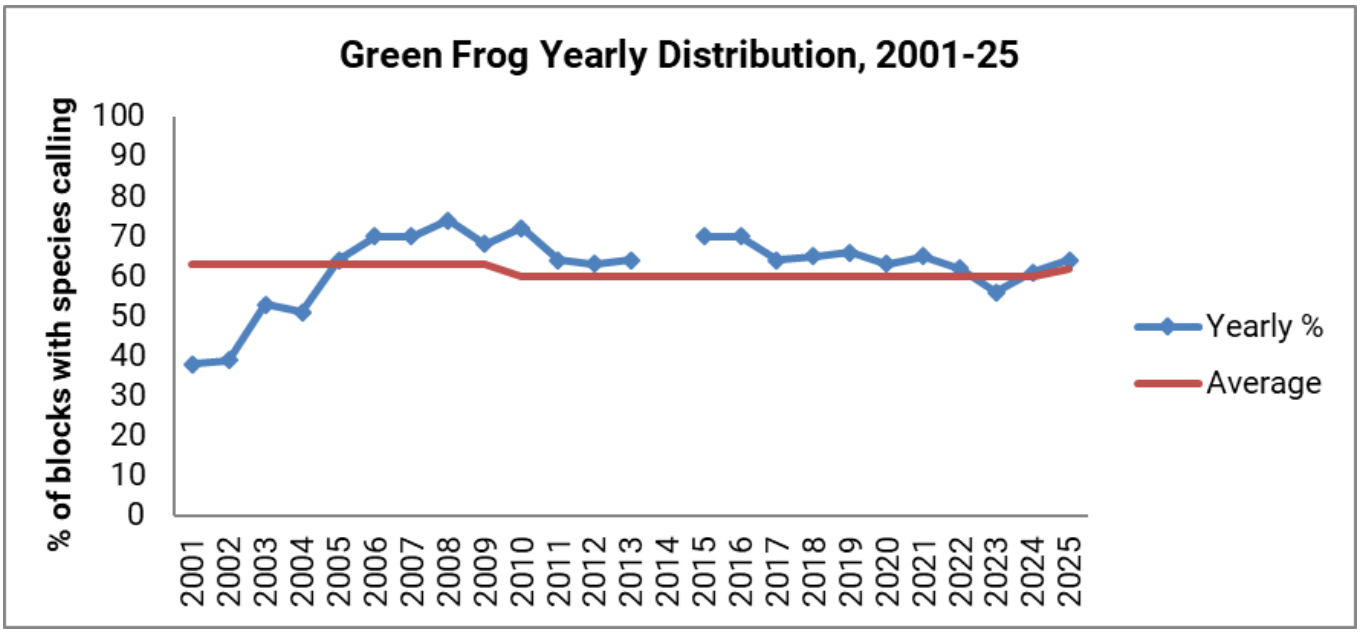
Map 8: Gray Treefrog (*Hyla versicolor*)





Map 9: Green Frog (*Rana clamitans*)





Map 10: Bullfrog (*Rana catesbeiana*)