

Do You Know Your Neighbors In Kent?

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ABSTRACT

The motivation behind this field guide project was to get people excited about the incredible array of wildlife around them in their neighborhood in the town of Kent, Connecticut. Excitement often translates into knowledge about a subject. Knowledgeable people are more likely to want to protect and conserve the habitat where these organisms are found. The objective was to help let the people of Kent discover the amazing biodiversity found within the different ecosystems in their town. Field guides were created by collecting organisms from multiple locations around the Kent area. Specimens were either brought back to the school to photograph or photographed in the field depending upon the sensitivity of the subject and then released back into the wild. The goal was to find 100 different species to photograph between the end of May and beginning of November of 2014. Despite limitations due to time constraints at school, unfamiliarity with the photography techniques, and weather issues, 107 different organisms were found and photographed. Two major findings were the discovery of two State species of Special Concern, the Eastern Ribbon Snake (*Thamnophis sauritus sauritus*) and the Jefferson “complex” Salamander (*Ambystoma jeffersonianum*). The discovery of these species, as well as many others suggests that Kent has a responsibility to learn and protect the species in their backyard to ensure that their children and grandchildren have the opportunity to experience the beauty of these creatures, some of which may only be found in Kent.

INTRODUCTION

There are many field guides that exist in New England, however your average person finds these guides to be very frustrating to use when attempting to identify organisms found specifically in their neighborhoods. This is due to several factors, such as:

1. Unfamiliarity with the taxonomic order of species in guides.
2. The similarity in appearance of many species.
3. Colored-illustrations that are not always accurate when printed in field guides.
4. Field guides have too many organisms for people to sort through because they cover large geographical ranges.

The purpose of our UCONN NRCA project, was to make simple, community-friendly field guides, utilizing the “*Meet Your Neighbours (MYN)*” style of photographing organisms on a white background whenever possible (Fig 1). *Meet Your Neighbours*, “is a worldwide photographic initiative dedicated to reconnecting people with the wildlife on their own doorsteps – and enriching their lives in the process. These creatures and plants are vital to people: they represent the first, and for some, the only contact with wild nature we have.” The creation of laminated field guide panels or pamphlets, attached to Kiosks and available to citizens on-line via the Kent Land Trust and Marvelwood School social media pages, will help people learn more about the incredible biodiversity that exists within their neighborhoods. The goal was to photograph and identify 100 different organisms.



Fig 1. (Upper right panel) Author collecting a marbled salamander (*Ambystoma opacum*; see upper left panel for close-up of species) from Tobin Preserve. (Lower left) Author photographing a species of concern reptile, the Eastern Ribbon Snake (*Thamnophis sauritus sauritus*; see lower right panels for close-ups of specimens).



METHODOLOGY

Study Area

Six primary study sites were selected in the northwest corner of Connecticut (Figs 2-7), primarily due to the ability of the researchers to easily access these locations. They were located in transitional forest zones between the Northern Hardwood Forest and the Central Oak-Hickory Forest. Deciduous trees dominant the forests in Kent.



Fig. 2 Tobin Preserve – KLT
Elevation: 1112 ft
(41° 46'43.39"N, 73° 23'34.49"W)



Fig. 5. Marvelwood School
Elevation: 1269 ft
(41° 46'55.87"N, 73° 27'26.26"W)



Fig. 3. Skiff Mountain South Preserve – KLT
Elevation: 1290 ft
(41° 46'33.94"N, 73° 27'24.04"W)



Fig. 6. Skiff Mountain North Preserve – SLT
Elevation: 1330 ft
(41° 47'13.45"N, 73° 27'24.04"W)



Fig. 4. Macedonia Brook State Park – CT DEEP
Elevation: 732 ft
(41° 46'3.42"N, 73° 29'42.02"W)



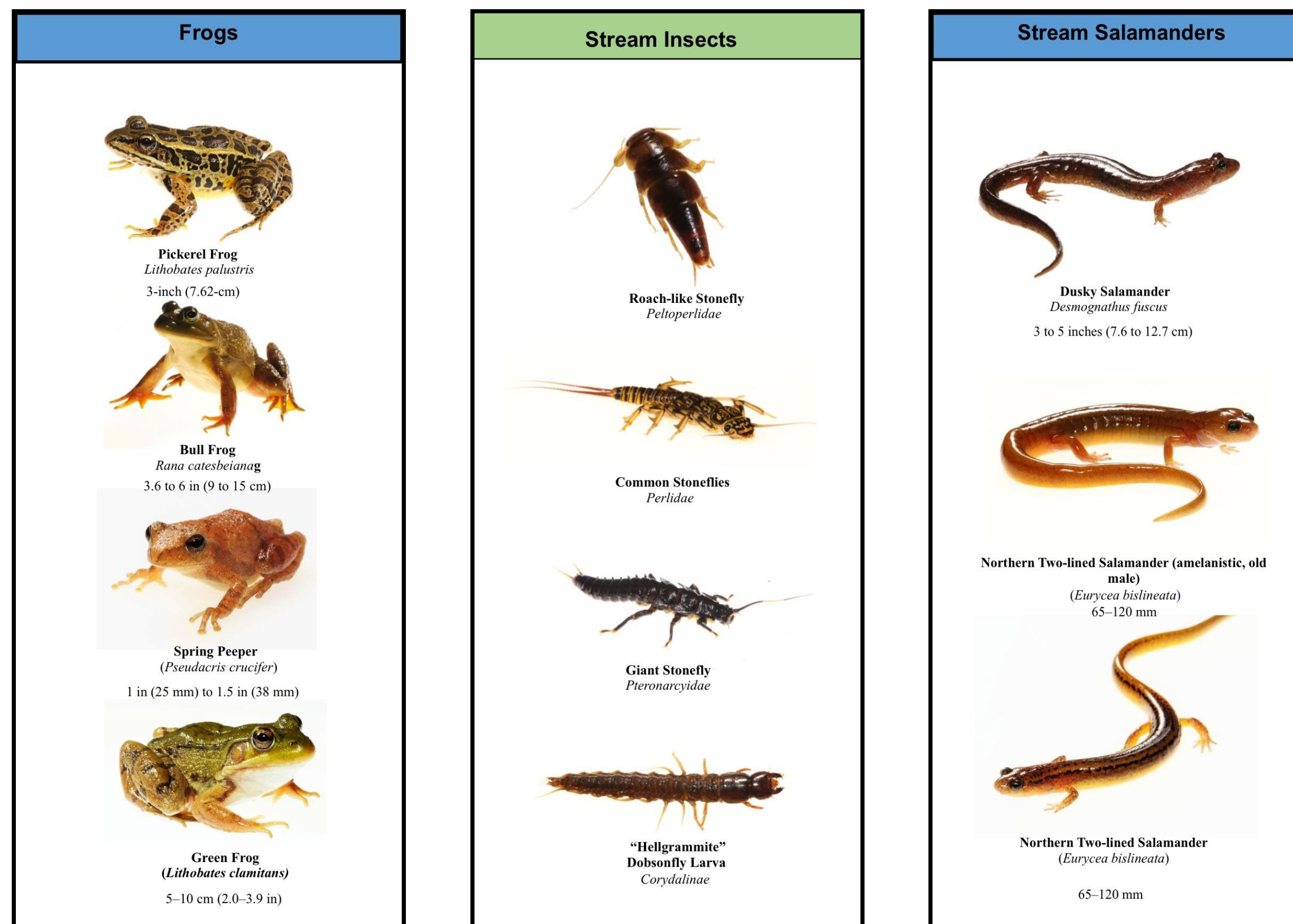
Fig. 7. North Kent Brook – Dr. Walter Kane
Elevation: 1099 ft
(41° 47'4.57"N, 73° 26'24.98"W)

Collection & Photography Techniques and Equipment

- Collections of organisms began in mid-May and finished in early November of 2014. A total for 124 hours was spent collecting and photographing organisms at different times throughout the day.
- Organisms were collected in many different ways (e.g. by hand, dip nets, mist nets, etc...). Birds were captured in mist nets during the late spring, summer, and fall at Marvelwood’s banding stations in Kent.
- Captured organisms were put in plastic Ziploc bags or specimen containers until they were photographed and released back into the wild where they were collected.
- Community volunteers and students from the Honors Biology Class at Marvelwood also assisted with collecting and photographing organisms. Sean Graesser, a Marvelwood School Alumni and a *Meet Your Neighbours* Contributing Photographer also provided key technical assistance.
- When possible photos were taken using the *Meet Your Neighbours* style of photography using a white background and multiple flashes. *Microsoft Paint* was used to crop background from images of organisms unable to be photographed on the white background.

- The following equipment was used:
 - Canon 60D DSLR camera & Canon EF 100Millimeter Marco Lens
 - Canon Speed Lite43EX Flash unit & two Yongnuo Pro 560 III Flash units
 - 3 Collapsible Soft Boxes & Cowboy Diffusers
 - Sheets of white Acrylic
 - Tupperware Containers to keep organism contained on acrylic sheet
 - Tripod & ½ inch PVC pipe to make the photography stand.

Fig. 8. Sample field guide panels representing a few of the organism types discovered and photographed.



RESULTS

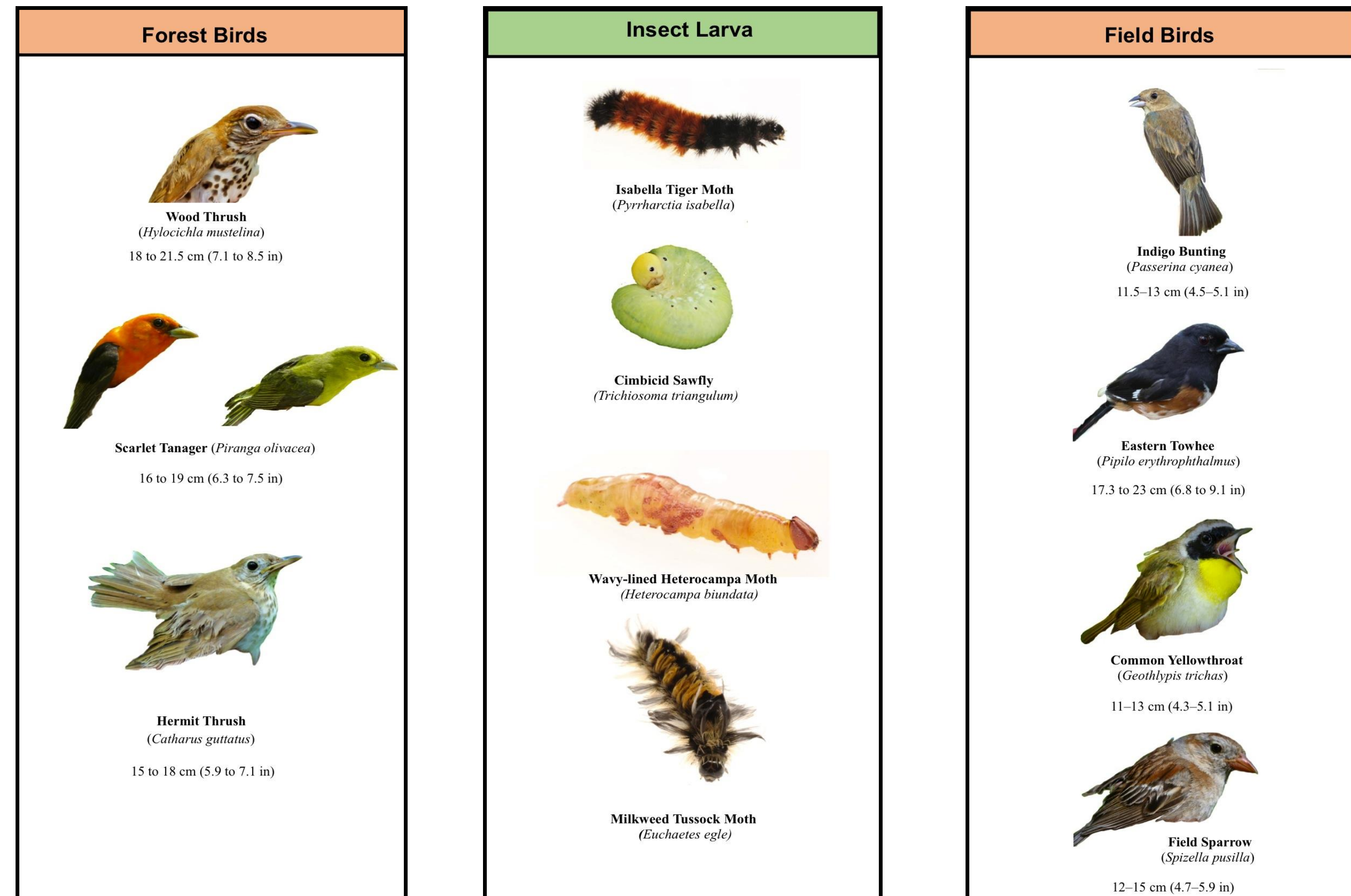
Despite limited time in the field once school started, challenges with the weather, and seasonality of some species; the team surpassed its goal of 100 species by finding 107 species in six categories (Table 1). Two of these organisms were species of Special Concern in Connecticut (i.e. Jefferson “Complex” Salamander and the Eastern Ribbon Snake).

Organisms were successfully photographed and turned into simple field guide panels for the public. Examples of images transformed into field guide panel or tri-fold pamphlet can be observed in Figures 8 and 9.

Table 1. Breakdown of organisms found and photographed.

Fauna Category	Total # Photographed
INSECTS	63
CRUSTACEAN	1
AMPHIBIANS	13
FISH	3
REPTILES	4
BIRDS	23
TOTAL	107

Fig. 9. Sample field guide panels representing a few of the organism types discovered and photographed.



CONCLUSIONS

The goal was to educate the public about the biodiversity of animals in their neighborhood by helping them identify different creatures found in Kent. These simple guides (which can be updated annually) were the first step in raising awareness about animals in Kent. The *Meet Your Neighbours* style of photography, while difficult at times, really helped to show the features of the animals, making it easier for people to identify them. Placement of these guides on Preserve Kiosks and online, should help people, especially children, learn to recognize wildlife and their habitats. This knowledge could also help the Kent Land Trust to manage different habitat areas critical to wildlife. Edward Osborne Wilson once said, “*When you have seen one ant, one bird, one tree, you have not seen them all.*” There are many rocks and logs unturned, many streams still unexplored, many forests teeming with wildlife, so together, lets continue exploring in Kent.

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REFERENCES

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