Using Field Guides

- Field guides are arranged in a variety of formats. Become familiar with the various components of the guide you are using. Read the section on how to use the guide.

- Learn the vocabulary used to describe specimens. Field guides may have a glossary, the topography of a bird, the structure of insects, the outline of fish, etc.

- Learn to use the range maps. You can often narrow the list of possible species when trying to identify a specimen by using the maps. Use caution as the maps may be accurate only on a large scale or you may be looking at a specimen that has not been recorded in your area before or has expanded its range. Also consider that an animal might have been released in an area it would not normally inhabit.

- Many individual animals may differ in appearance from the example in the guide. Concentrate on identifying features.

- Some field guides use arrows to pinpoint key field marks or important distinguishing features. Learn what to look for.

- Narrow down choices by using keys, silhouettes, plates, table of contents, etc. where available. Identification is the process of 'narrowing down'.

- Observe the habitat an animal is found in. This is often a clue to its identity. Turtles, snakes, and amphibians lack the mobility of birds & mammals and rarely leave their ideal habitat. You may chance upon a species outside of its known range (relocated, exotic, look-a-likes, not yet identified in that area).

- Different skills and observations are used to identify different groups of animals. Ask yourself questions.

  Birds – size (house sparrow, robin, crow), body shape (plump, slender, etc), wing design (rounded, sharply pointed, etc), bills (small & fine, hooked, dagger like, stout & short, etc.), tails (forked, square, notched, rounded, pointed, etc), feet (perching, talons, toes, etc), behavior, flight pattern, songs or calls, coloration, habitat, range maps

  Mammals – tracks (toes, claws, stride, etc.), skulls (size, features, etc.), dental formula (incisors, canines, pre-molars, molars), fur, antlers, scat, habitat

Turtles – arrangement of scutes that make up the shell, habitat

Snakes – arrangement of scales, anal plate, shape of the head, taper of the tail (wide, narrow), shape of the eye pupil, coloration (immature, mature), habitat

Amphibians – vocalizations, size, habitat

Insects – often dealing with various unlike stages of development, general appearance (size, shape, color), body parts (antennae, legs, wings, etc.), how it acts, habitat, sounds, odor, hardness of body

Fish – color, fins, habitat, structure, measurements, mouth

- Practice! Practice! Practice! and then Practice some more!
- MA Envirothon uses the Peterson Field Guide series to Mammals, Eastern Birds, Freshwater Fishes, Insects, Reptiles & Amphibians and Trees & Shrubs.