



4-H Entomology

Kansas State University



18 U.S.C. 707

ATTENTION: The 2015 changes are encouraged for the 2015 State Fair, but will be required at the 2016 State Fair. This will give some extra time for the new rules to be shared to the 4-H'er as well as give adequate time to make the necessary changes.

*New! Insect specimens can now come from anywhere in US

- Although collections from within the High Plains are encouraged, specimens from within the continental US are now accepted.

*New! Specimen labels changes

- Collector name should be included on the label.
 - The collection should be a representation of work done by the exhibitor, and should not include insects taken from other collections or purchased for display. Insects given to the 4-H'ers are allowed in the collection if the 4-H'er prepared and pinned the specimens. Therefore, as long as the exhibitor is pinning, labeling and displaying the insect they would generally be considered the collector, even if someone else physically caught the insects.
 - Acceptable formats for the Collectors Name:
 - Coll. S Zukoff
 - S Zukoff Coll.
 - S Zukoff
 - collected by –
 - Prepared for exhibit by --



- Full county names should be included on the label
 - Counties outside of the state of Kansas may not have abbreviated names that are easily accessible or even available. Therefore, in order to have consistency throughout the collection, specimens collected both inside and outside of KS should have full county names spelled out on the label.
- Order of the information on the collection label should be as follows:
 - Locality (County, State), Date, collector

*New! Taxonomic identification of specimens will follow Bugguide.net for all Order and Family names

- Bugguide will be the "official" taxonomic reference. This resource is an invaluable online resource hosted by Iowa State University, and is currently the only accessible identification resource that is up-to-date for student use. Taxonomy listed in the Kansas Insect Guide is now very much out dated and many major changes in Orders have occurred since its publication.
- ANY resource, including the Kanas Insect Guide may be useful to 4-Hers as a resource, but the taxonomy must be double checked with the taxonomy outlined in Bugguide. "A students guide to using Bugguide.net" will be available soon for 4-Hers as well as a list of resources to aid in the identification of their insects.
 - Only specimens under the class Insecta can be used in the collections
- Arrangement of the Orders in the box is up to the 4-Her.

**Penalty reductions of the new rules will not occur at the 2015 State Fair, but when deciding ribbon placement, those that made more of an effort to convert to the new rules may be favored over those that did not. The new rules will be in full effect in 2016.



Special note to 4-Hers in Entomology: 4-Hers put a lot of work into the entomology collections and it would be valuable to add their specimens to the KSU entomology collections when the student is done with them. These would be a lasting legacy left by the 4-Hers that can be used for future educational purposes by students, professors and visiting scholars of KSU.

*Contact Dr. Sarah Zukoff if interested at
snzukoff@ksu.edu*

Explanation of rule changes

We have heard of some concerns over the above rule changes, such as, why are you making these changes, why are we now requiring the collectors name on each specimen, and how can we possibly get all of the labels changed by fair time.

The main reason for making these changes is that the taxonomy used in the book Insects of Kansas has changed. Homoptera are now Hemiptera; Collembola are no longer considered insects; etc. We felt that we needed to be promoting current taxonomic nomenclature rather than requiring members to follow an outdated system. Since we did not have a way to update the book we decided to name the website Bugguide.net as the “official” taxonomic reference for our insect collections, since it is updated on a regular basis. This does not mean that the Insects in Kansas or other books will not be useful in identifying insects. It just means that once an insect is identified, one should check Bugguide.net for current information on the correct order and family names. Not every insect will have to be checked, once you know the proper placing of one individual of an order or family then one can generally assume that other members of that order or family are probably also correct.

Once we decided to make this change, that lead to taking a look at other rules. Why limit collections to only Kansas insects, many of our counties border other states so it may be just as easy for a Kansas 4-H'er to collect in a neighboring state as a neighboring county. So why limit collections to just the insects of Kansas, we suspected that rule probably came from using the Insects of Kansas as the main reference book for the collections. Thus, if we changed the reference book why not allow insects from outside of Kansas. We still assume that a majority of the insects will be collected in Kansas, but it will allow individuals that live near or travel to other states to include those insects in their collections. While some might say that this will provide an unfair advantage to some individuals, we feel that since the collections are mainly judged on a point system based on the number of specimens and the number of orders, and since Kansas has a very diverse insect fauna, and since points are not awarded for showy or exotic insects that there are more advantages to allowing out of state insects into the collections than to limit collections to just Kansas Insects.

Why the label changes? We again decided that we should be teaching more proper practices rather than following tradition. Most collectors put their names on every insect. That way their specimens can be merged into larger collections. As mentioned, we would be interested in receiving specimens from 4-H collections for inclusion into the University’s teaching and reference collections. Having proper labels on each specimen would help in this process. This is not a change in what insects should or should not be included in the collection. In the past we assumed that the whole collection was the work of the exhibitor. So as long as the exhibitor is pinning, labeling and displaying the insect they would generally be considered the collector, even if someone else physically caught the insect. Thus, you can still exhibit insects caught by a neighbor or relative or share insects on a collecting trip, but one should not exhibit insects pinned and labelled by someone else or purchased from a supply company. In some cases you might even go to the trouble of listing the collector as one person and then listing the exhibitor as the person preparing the specimen for exhibit.

How do you expect us to make all of these changes by fair time? The simple answer is that, we don't. We know that not everyone will get the message that the rules are changing. We know that it will take time to make these changes. So we will use this year to try to alert everyone to the changes. We will make notes when judging collections on the new rules, but will not deduct points. We suggest that you break this down into reasonable sections. Maybe work checking for changes in order and family names this year and adding full county names and collector names to labels next year. Or maybe label all of the new insects you collected this year with the new labels and relabel the rest of your collection next year. We will take this into consideration when judging the consistency of labeling the next couple of years knowing that you may not have time to get all of the labels changed before fair time.

Again, we know that change is difficult, it takes time and it can cause confusion. If you have questions or concerns contact: Contact Dr. Sarah Zukoff snzukoff@ksu.edu.

