

NATURAL SCIENCES PROJECTS

All projects checked in Monday, Aug. 7, 2017
at 1 p.m.

Forestry

All forestry exhibitors may make two forestry exhibits. One as Mounted Forestry Specimen and one in the Advanced Forestry exhibit. Please refer to the "4-H Forestry Exhibit Requirements and Classes" (4-H 33121). Some of the Family names have changed, especially the flowering trees, shrubs and wildflowers as below: Current Family Name on Approved Species List Change to: according to the Plants of the Pacific NW Coast book.

Pea Family (Leguminosae)

Pea Family (Fabaceae)

Sunflower Family (Compositae)

Aster Family (Asteraceae)

Who May Exhibit

Junior, Intermediate and Senior members may make one or more exhibits - one mounted as a Forestry Specimen and one in each qualified Advanced Forestry exhibit class. Please refer to the *4-H Forestry Exhibit Requirements and Classes (4-H 33121)*. Note: Each exhibit must be labeled with the member's name, county and class number. For members who have previously been in 4-H forestry, exhibit all their mounts (the total number of mounts will be higher than listed in the division through 2011 fair), but only the 5 new ones will be judged. If you want to redo mounts to meet the new requirements you may do so.

Mounted Forestry Specimens

Tree and shrub specimens exhibit must be listed on the official forestry specimens list available in *4-H Forestry Exhibit Requirements and Classes (4-H 33121)*. For Seniors exhibiting wild flowers and ferns use the "other Reference Texts" list. Intermediate and Senior members must use the *Specimen Collection Site Analysis Sheet* for each specimen collected.

Junior Division

441 100 011 Forestry Junior First Year: index 5 mounts, all must be trees

441 100 021 Forestry Junior Second & Third Year: Index 10-15 mounts, all must be trees. Only the index and 5 new mounts will be judged.

Intermediate & Senior Divisions

The number of mounts may vary depending on the number of years in the project. All mounts should be exhibited. The new mounts should be placed in front of the old mounts in the book. Only the index and 5 new mounts with site analysis sheets will be judged. Intermediates new mounts may include trees and shrubs. Seniors new mounts may include trees, shrubs, ferns and wild flowers.

441 100 012 Forestry Intermediate First Year: the number of mounts may vary from 5 to 20.

441 100 022 Forestry Intermediate Second & Third Year: the number of mounts vary from 10 to 30.

441 100 013 Forestry Senior First Year : the number of mounts may vary from 5 to 35 mounts.

441 100 023 Forestry Senior Second & Third Year: the number of mounts may vary from 10 to 45.

Advanced Forestry Exhibits

These classes are open to Forestry members. Members may exhibit in one topic or make one exhibit by

combining topics. Junior and Intermediate members exhibit 10 or more specimens; Senior members exhibit 15 or more specimens. All must have been collected in the current 4-H year. One exhibit per class number. Exhibit may be a flat board or 3-dimensional. Three-dimensional display size maximum is 30" in length, 24" deep (front to back) and 36" high. Include explanation to the judge as outlined under Educational Display in fair book. The flat board maximum size is 22" by 28". Refer to guidelines in the "*4-H Forestry Exhibit Requirements*" (1998) for specific advanced forestry exhibit details.

Educational Display exhibits are scored using the Educational Display Check Sheet (40-463), available at the County Extension office or on the State 4-H website at <http://oregon.4h.oregonstate.edu/resources/materials>.

441 200 511 Junior First Year Forestry Member: advanced exhibit. Topic include cones, tree seeds, conks, damage specimens, bark, wood mounts, lumber mounts or other educational displays.

441 200 52_ Advanced Forestry Exhibit: using one or combining the topics of cones, seeds and bark.

441 200 53_ Advanced Forestry Exhibit: using one or combining the topics of conks and damage specimens.

441 200 54_ Advanced Forestry Exhibit: using one or combining the topics of wood mounts and lumber mounts.

441 200 55_ Advanced Forestry Exhibit: educational display (i.e., management plans, tree farm maps, model camp sites, career opportunities, forestry concept or use your imagination to create your own display.)

Note: Fill in blank in class number () with corresponding number for Junior, Intermediate or Senior.

1. Junior
2. Intermediate
3. Senior

Marine Science

An EDUCATIONAL EXHIBIT relating to the marine environment. May be either salt water or fresh water. May not exceed 30" in width, 24" deep (front to back) and 36" high. Include explanation to the judge as outlined under Educational Display in fair book. Each exhibit piece must be labeled with the member's name, county and class number. Judging criteria is outlined on *4-H Educational Poster/Display Score Sheet (40-463)* available at the County Extension office or on the State 4-H website at <http://oregon.4h.oregonstate.edu/resources/materials.html>.

423 200 011 Marine Science, Junior First Year

423 200 021 Marine Science, Junior Second and Third Year

423 200 012 Marine Science, Intermediate First Year

423 200 022 Marine Science, Intermediate Second and Third Year

423 200 013 Marine Science, Senior First Year

423 200 023 Marine Science, Senior Second and Third Year.

423 200 034 Marine Science Club (2 or more members)

Entomology

Note: Each exhibit piece must be labeled with the member's name, county and class number. All insects

must be collected in the current year for Juniors First Year exhibit. At least 50% of those displayed by Juniors Second and Third Year, Intermediates and Seniors must have been collected in the current year. New requirement beginning in 2014: An insect information sheet, titled Information on New Insects in Collection for Current 4-H Project Year, is required with Intermediate and Senior insect collections. This sheet should be completed only for the new insects collected in the current project year. Make additional copies of page 2 as needed to list the new insects in the current year. The form is available on line at <http://oregon.4h.oregonstate.edu/natural-science>. Attach the completed sheets to the bottom of the collection box in an unsealed envelope for the judge to read at fair.

821 100 011 Entomology, Junior First Year, 10 insects, at least 8 orders.

821 100 021 Entomology, Junior Second and Third Year, 20 insects, at least 10 orders.

821 100 012 Entomology, Intermediate First Year, 16 to 30 insects, at least 12 orders.

821 100 022 Entomology, Intermediate Second and Third Year, 36 insects, at least 12 orders.

821 100 013 Entomology, Senior First Year, 26-40 insects, at least 15 orders.

821 100 023 Entomology, Senior Second and Third Year, 50 insects at least 15 orders.

821 100 56_ Other Entomology Exhibits, Spiders and other insect relatives exhibit. Exhibit can include a collection of spiders, centipedes, millipedes, ticks,mites, scorpions or a combination of insect relatives and or an educational display about them. Examples for a display could include experimnts, surveys, photographs, life histories, etc. Live spiders or insect relatives may not be displayed. Specimen Collections should be collection of identified bottles fastened into a box. Exhibitors making a collection using alcohol bottles should follow the guidelines for insect specimens in the entomology manual. Educational displays may not exceed 30" in width, 24" deep (front to back) and 36" high.

Judging will be based on condition of specimens, mounting, labeling, attractiveness, correct number of specimens, correct identification and educational value of exhibit. Additional information is found in the Entomology Project Manual (4H3221 July 1995). Judging criteria are outlined on the Entomology Exhibit Score Card (40-605), available at the county Extension Office or on the State 4-H website at: <http://oregon.4h.oregonstate.edu/fair-exhibit-and-contest-materials>. Some of the orders have changed in Entomology by combining old orders or making new ones. Be sure to use the current order names for the insects check with the Extension office or go to the State 4-H website at: <http://oregon.4h.oregonstate.edu/natural-science>. See the link to "UPDATE" under the heading First Year, next to the 4-H Entomology Manual (4H3221) for the updated "Insect Orders, Meanings, Common Names". **Recommended reference for entomology orders** for labels of specimens, Borror and DeLong's Introduction to the Study of Insects 7th Edition written by Charles A. Triplehorn and Norman F. Johnson. In the event of a discrepancy this reference will be considered the correct information source.