



HUMAN SUBJECT AND ANIMAL USE GUIDELINES

MUST BE READ BY PARTICIPANTS, PARENTS, AND TEACHERS PRIOR TO REGISTRATION

Please note that experiments and studies performed on organisms which lack nervous tissue (plants, fungi, bacteria, protists and sponges) and microscopic invertebrates do **NOT** require approval from the WBRSF Safety and Ethics Committee unless these organisms are potentially pathogenic or contain recombinant DNA. Participants which undertake projects which involve the use of recombinant DNA, the use of potentially pathogenic organisms, or experimentation on macroscopic animals must complete an “Application to Perform Research with DNA, Biological Agents, or Animals” and receive approval to proceed **BEFORE** beginning their project. Participants that perform experiments or studies using human subjects must complete an “Application to Perform Research with Human Subjects” and receive approval to proceed **BEFORE** beginning their project.

All projects involving live animals or humans must have scientific merit, educational value, and avoid gratuitous harm. Every effort must be taken to limit or avoid injury or distress to animals. Students should refer to the ethical guidelines developed by the Canadian Council on Animal Care (<http://www.ccac.ca>) and Youth Science Canada (www.ysf.ca). Research done by pre-university students is subject to the Health of Animals Act (Bill C_66); the Criminal Code of Canada, Section 446, Cruelty to Animals; and the Alberta Animal Protection Act. Work with human cells, tissues, or fluids, pathogenic organisms, animal viruses, or experiments in which vertebrate animals are physically or emotionally/psychologically distressed or injured may only be performed at a college, university, hospital or recognized research institution under the direct supervision of a qualified person.

INVERTEBRATES

Approval is NOT required from the WBRSF Safety and Ethics Committee for the following types of projects:

1. Experiments and studies performed on microscopic invertebrates.
2. Observational studies which take place in a natural setting (or simulated natural setting) in which the animal is not threatened or disturbed. Animals kept in enclosures must be well cared for and not exposed to conditions which might cause distress, injury, or death.

Approval IS required from the WBRSF Safety and Ethics Committee for the following types of projects:

1. Experiments performed on macroscopic invertebrates involving the manipulation of the environment or the provision of a positive reward system (training an animal to navigate a maze for instance). The animal is not exposed to conditions which might cause distress, injury, or death.
2. Experiments performed on macroscopic invertebrates in which the animal may be harmed. Every precaution must be taken to limit distress, injury, or death. Experiments of this sort may only be conducted by Junior and Senior level students under the guidance of an appropriate adult supervisor.

Note: Due to their well-developed vertebrate-like central nervous system, cephalopods (squid, octopus or cuttlefish) shall be treated following the regulations in place for vertebrate animals.

NON - HUMAN VERTEBRATES

Approval is **NOT** required from the WBRSF Safety and Ethics Committee for observational studies of non-endangered species in natural settings where the animal is not threatened or disturbed in any way (for instance, the observation of birds at a bird feeder) or the observation of normal behaviours in household pets.

ALL OTHER PROJECTS MUST BE APPROVED BY THE WBRSF SAFETY AND ETHICS COMMITTEE

Only Senior students will be permitted to perform research that causes injury or distress to vertebrates. This research must be done under the close supervision of a qualified researcher.

HUMANS

ALL PROJECTS WHICH INCLUDE THE USE OF HUMAN SUBJECTS (EXPERIMENTS, STUDIES AND SURVEYS) MUST BE APPROVED BY THE WBRSF SAFETY AND ETHICS COMMITTEE

Subjects must understand that their participation is voluntary, they must agree to any specific disclosure of personal information that may be required, and they must be made fully aware of, and consent to, any risks that may be involved. The identity of the subjects should only be known to the researcher(s) and must not be identified on the data presented in the project. The researcher(s) must ensure that the participating subjects and the researcher(s) are subjected to minimal risks to their physical and/or psychological well being.