HMSC Animal Care Plan

Goal
Oregon State University’s (OSU) Hatfield Marine Science Center (HMSC) is committed to the health and well-being of animals used in research, education and outreach activities on campus. HMSC is also dedicated to educating students and teaching the skills necessary to be responsible for the ethical and humane treatment of animals in our care. The HMSC Animal Care Plan (ACP) covers the care of all live vertebrate and post-larval nonplanktonic invertebrate animals held in captivity in any of OSU-HMSC facilities.

The HMSC Animal Care Plan includes:
- Scope
- Animal Care Committee
- ACP Requirements
- Animal Care Support
- Support Documents

A. Scope:
All personnel working within any of OSU-HMSC facilities (Researchers) holding live post-larval nonplanktonic animals (Animal(s)) in captivity are required to abide by the policies and procedures outlined in the ACP. Following the ACP is recommended for all OSU personnel working in non-OSU facilities on the HMSC campus. Captivity is defined by the purposeful act of confining a live animal for any length of time. Animals include both vertebrates and invertebrates. The ACP is in compliance and aligns with all federally-mandated Institutional Animal Care and Use Committee (IACUC) guidelines, requirements and policies regarding the care of vertebrates. The ACP expands the IACUC requirements to include the welfare and ethical care of live post-larval nonplanktonic invertebrates. Any research, education, or outreach activities (including holding and observation) (Activities), involving Animals in OSU-HMSC facilities shall be guided by the ACP. All personnel using OSU facilities will be made aware of the ACP requirements at the time of space use agreements.

B. Animal Care Committee:
The Animal Care Committee (Committee) is responsible for providing the oversight and training resources necessary to support the ACP. The Committee is made up of three individuals representing research, education, and outreach interests on the HMSC campus and is advised by the HMSC clinical veterinarian. Committee members are appointed by the HMSC Director. The Committee meets as-needed but not less than once a year. The term of any Committee member is at the discretion of the HMSC Director.

The Committee’s charge is to ensure basic Animal needs are met and unnecessary pain and distress is avoided whenever possible. To this end, the Committee collaboratively creates general Guidelines for Animal Care (Guidelines). The Guidelines provide guidance on common sense animal care standards. Any Activities involving invertebrate Animals conducted by Researchers must follow the pre-approved Guidelines whenever possible. If it is not possible to achieve the Activities goals following the Guidelines, Researchers must follow documented best
ethical practices to achieve the Activities goals. The Committee provides best practice resources and consultations upon request. Guidelines are living documents and are periodically reviewed and updated. The most current Guidelines are available on the HMSC ACP web page.

A representative, approved by the Committee, is responsible for periodic monitoring of Researchers’ Animal care. The Committee will inform the Researcher in writing of any animal welfare concerns, recommend suggested alterations, and set a timeline for improvements. If the Researcher does not address the issue and start changes within the set timeline, the Researcher may have their space use approval revoked. A violation, resulting in revoked space use approval, may impact the Researcher’s future ability to hold Animals in captivity at HMSC.

The Committee recommends minimum animal care training requirements for all Researchers. Additional training may be required by OSU Environmental Health and Safety if Activities include chemical use or biosafety hazards.

The Committee is responsible for the clear and transparent communication of the ACP and all related guidelines, requirements, trainings and resources. The Committee periodically reviews the ACP and maintains a current webpage on the HMSC website where Researchers can review the ACP, access all supporting documents and discover any additional learning opportunities relating to animal care.

C. ACP Requirements:

1. Animal Care Protocols
   Approved Guidelines created by the Committee incorporate best practice methods for holding, feeding and endpoint for all Animals held in captivity by Researchers. Any Activities involving invertebrate Animals conducted by Researchers must follow the Guidelines whenever possible. If it is not possible to achieve the Activities goals following the Guidelines, Researchers must follow best practices to achieve the Activities goal with Animal welfare in mind. Any Activities involving vertebrate animals must follow the IACUC Animal Care and Use Proposal requirements.

2. Labeling
   All invertebrate Animals held by Researchers must clearly display a lab tag identifying (1) the name of the individual responsible for the Animals’ care, (2) the individual’s Unit, (3) contact information, (4) species held, and (5) the dates the Animals will be in captivity. For any Activities involving vertebrate animals, a copy of the approved IACUC Animal Care and Use Proposal (ACUP) number must be displayed before a project begins.

3. Monitoring
   Researchers must contact the Committee head by email prior to starting, ending, or significantly altering any Activities involving Animals. A Committee representative must have access to OSU-HMSC facilities holding Animals for periodic welfare monitoring. It is highly recommended that care protocols, records, and monitoring forms are readily available to the representative. Researchers will be made aware of any welfare concerns in writing. Researchers must address any welfare concern by providing documentation of best practice protocols in use or by altering working protocols to fall in line with Guidelines in a timely manner.
4. Use of the Open Flow-Through Saltwater System
All Animals in captivity on the HMSC campus using the open flow-through saltwater system should follow HMSC Open Flow-Through Saltwater System Use Requirements. The most current Requirements are available on the HMSC ACP web page.

D. Animal Care Support:
The Committee Chair can help connect Researchers to additional Animal care support upon request including but not limited to:
- Veterinary support
- Facility reviews
- Pre-diagnostic and diagnostic services
- Life support consultations
- Best practices guidance
- Trainings and resources
- Equipment and reagent check out

E. Resource Documents:
- Guidelines for Animal Care
- HMSC Aquatic Animal Husbandry-Species Specifics
- Example animal husbandry logs
- Cephalopod health metrics
- Example lab tag