TEXAS A&M UNIVERSITY CORPUS CHRISTI

Institutional Animal Care and Use Committee

Minutes for June 11, 2021

Call to Order

The Texas A&M University-Corpus Christi Institutional Animal Care and Use Committee (IACUC) met on June 11, 2021, via WebEx. A quorum was confirmed, and the meeting was called to order on June 11, 2021, at 1:00 pm with the following members present.

Total Number of Members Present in Voting Capacity: 8 # required for a quorum: 6

Meeting Attendance

Meeting Chair:

Chair name	Voting Status	Membership	Affiliation	Scientific	Arrive late	Left Early	WebEx
Felix Omoruyi	Voting	Full	Affiliated	Scientific	N/A	N/A	WebEx

Members Present:

Member name	Voting Status	Membership	Affiliation	Scientific	Arrive late	Left Early	WebEx
John Scarpa	Voting	Full	Affiliated	Scientific	N/A	N/A	WebEx
Jean Sparks	Voting	Full	Affiliated	Scientific	N/A	N/A	WebEx
Eric Christensen	Voting	Full	Affiliated	Non-Scientific	N/A	N/A	WebEx
Cecelia Gonzales	Voting	Full	Unaffiliated	Non-Scientific	1:02pm	N/A	WebEx
Kesley Banks	Voting	Alternate, Curtis	Affiliated	Scientific	Reentered at 1:26 pm	Exited at 1:20pm	WebEx
Nathan Galvin	Voting	Alternate, Coons	Affiliated	Scientific	N/A	N/A	WebEx
Frauke Seemann	Voting	Alternate, Silva	Affiliated	Scientific	N/A	N/A	WebEx
Angelica Chapa	Non-Voting	Alternate, Sparks/ Omoruyi	Affiliated	Scientific	N/A	N/A	WebEx
Michelle Costa	Non-Voting	Alternate, Gonzales	Unaffiliated	Non-Scientific	N/A	N/A	WebEx

Staff and Guest Present:

Name	Job Title	Teleconference
Rebecca Ballard	Director, Research Compliance	WebEx
Linda Villarreal	Program Manager	WebEx

I. Conflict of Interest

Members are reminded of their obligation to disclose any conflict of interest related to any of the items on today's agenda.

The chair called for any disclosures of conflict of interest. No conflicts were declared. During the meeting, a COI

was declared and is noted in the minutes on the relevant item.

II. Minutes

Minutes from May 21, 2021 were reviewed. The Chair invited additional comments, questions, and/or concerns. Having none, the motion to approve/approve was made, seconded, and carried.

Vote yes: 8	Recused: 0
Vote no: 0	Excused: 0
Abstain: 0	

III. New Studies

IACUC Number:	TAMU-CC-IACUC-2021-06-016
Principal Investigator:	Gregory Stunz
Conflict of Interest:	None
Primary Reviewer:	Omoruyi and Chapa
Protocol Title:	Collection of juvenile estuarine nekton
Protocol Type:	Animal Research Protocol
Study Objectives:	Estuaries along the Texas coast contain many highly productive habitats including seagrass meadows, oyster reefs, salt marshes, and mangroves. These critical areas function as Essential Fish Habitat (EFH) for a number of economically and ecologically important juvenile fishes and crustaceans (nekton) which play significant trophic roles in the estuarine food web. Understanding the use of estuarine habitats by these species of juvenile fishes and crustaceans is critical towards gaining a better understanding of the use and relative value of these estuarine habitats. The main objective of this project is to assess changes in nekton densities among important estuarine habitats in Texas bays and to examine the effects of re-opening tidal inlets to the recruitment and population dynamics of fishes and crustaceans in these estuarine environments.
Lay Summary:	Juvenile fishes and crustaceans (typically, 0.1 - 1.0 cm standard length) will be collected using an epibenthic sled, seine net, modified oyster dredge, drop sampler, or beam/otter trawl. These are well established in the literature as efficient gear for sampling small nekton in shallow estuaries (Rozas and Minello 1997; Stunz et al. 2002; Reese et al. 2008; Neahr et al. 2010). These organisms are typically unidentifiable to species level in the field and require the use of microscopic techniques back in the laboratory. No endangered or threatened species are targeted. Few adult fishes that are incidentally captured are counted and then released unharmed. Juvenile estuarine fishes and crustaceans will be humanely euthanized by submersion and preservation in a 10% formalin solution in the field, which is an accepted means of euthanasia for marine fish surveys and museum collections as per the Guidelines for the Use of Fishes in Research by the American Fisheries Society (2014, pg. 27). In the laboratory, organisms are sorted, counted, identified to the lowest possible taxon, and measured. Once a sample is processed, the organisms are preserved in a 70% ethanol solution for long-term storage. Neahr, T. A., G. W. Stunz, and T. J. Minello. 2010. Habitat use patterns of newly settled spotted seatrout in estuaries of the north-western Gulf of Mexico. Fisheries Management and Ecology 17(5):404-413.

Reese, M. M., G. W. Stunz, and A. M. Bushon. 2008. Recruitment of Estuarine-Dependent Nekton Through a New Tidal Inlet: the Opening of Packery Channel in Corpus Christi, TX, USA. Estuaries and Coasts 31(6):1143-1157.

Rozas, L. P., and T. J. Minello. 1997. Estimating Densities of Small Fishes and Decapod Crustaceans in Shallow Estuarine Habitats: A Review of Sampling Design with Focus on Gear Selection. Estuaries 20(1):199.

Stunz, G. W., T. J. Minello, and P. S. Levin. 2002. A comparison of early juvenile red drum densities among various habitat types in Galveston Bay, Texas. Estuaries 25(1):76-85.

CITI: Yes OHP: Yes

Kesley Banks exited the meeting at 1:20 pm.

Discussion: The euthanasia process has changed. We cannot accept the listed euthanasia process. Small fish should be anesthetized via MS222 or thermal shock even when in the field. They need to be anesthetized before they are euthanized by submersion and preservation in a 10% formalin solution in the field. The guidelines clearly state this. What the PI has is for tissue. If the updated method interferes with the study objectives, this needs to be indicated and references noted.

The database search may be a little restrictive. It is up to the committee to decide which database searches are acceptable. This one is acceptable.

Clarify that the species penaeidae is 500 per year. This species is not on the permit. The permit does cover invertebrates. No need to clarify.

Summary: The change in the euthanasia process was discussed. The new euthanasia process is not acceptable. It does not follow the set guidelines for small fish. Small fish should be anesthetized via MS222 or thermal shock even when in the field. . They need to be anesthetized before they are euthanized by submersion and preservation in a 10% formalin solution. What the PI has is for tissue. If the updated method interferes with the study objectives, this needs to be indicated and references noted.

The Chair invited additional comments, questions, and/or concerns. Having none, the motion to approve with stipulations/ with a review period of one year to be reviewed by the chair was made, seconded, and carried.

Stipulations include:

1. Clarify if the euthanization process has changed due to the use of tissues, not fish or if it will interfere with the experiment.
2. Update the euthanization process clarifying that the small fish will be anesthetized via MS222 or thermal shock even when in the field. As stated in the AVMA Guideline for the Euthanasization of Animals (2020) or American Fisheries Society (2014)., fish should be anesthetized before they are euthanized by submersion in formalin solution whether in the field or lab.

Vote yes: 7
Vote no: 0
Abstain: 0

Recused: 1, COI Banks
Excused: 0

Kesley Banks reentered the meeting at 1:26 pm.

IV. Continuing Review

IACUC Number: 09-19
Principal Investigator: Simon Geist
Conflict of Interest: None
Primary reviewers: Scarpa and Seemann
Project title: Energy demand of wild-caught fish larvae and early juveniles in Northern Gulf of Mexico - pilot study
Protocol type: Animal Research Protocol
Protocol Summary: This pilot study will measure metabolic rates in wild-caught larval and early juvenile stages of fish in the Northern Gulf of Mexico to determine their average energy demand, which is an important measure to construct energy budget models that can feed into larger models for ecosystem-based fisheries management. The pilot project will be used to evaluate the feasibility of conducting these physiological experiments onboard an NOAA research vessel (RV PISCES) during routine NOAA SEAMAP Ichthyoplankton surveys. In case of a positive outcome of this pilot, it is envisioned to use the generated data and proof of feasibility to prepare a proposal to NOAA or NSF programs exploring the effects of hypoxia and/or changing salinity on the physiology of early life stages of fish with wild-caught specimens.
CR update: No experiments were conducted under this AUP in the reporting period.
Adverse Events reported? No
Alternatives to Animal Use? No
Alternatives to Potentially Painful Procedures? No
Not Unnecessarily Duplicative? Yes

CITI verified – Yes OHP verified - Yes

Discussion: No experiments were conducted during the last year. The fish numbers are different in various parts of the protocol. The number for the power analysis is 576. The animal list is 345 for 3 years. The maximum fish is 288. These numbers need to be consistent throughout the protocol. Stipulation, clarify the animal list numbers to be consistent throughout all areas noted in the protocol.

The Chair invited additional comments, questions, and/or concerns. Having none, the motion to approve with stipulations with a review period of one year to be reviewed by the chair was made, seconded, and carried.

Stipulations include:
1. Clarify the animal list numbers to be consistent throughout all areas noted in the protocol.

Vote yes: 8 Recused: 0
Vote no: 0 Excused: 0
Abstain: 0

IACUC Number: 22-18
Principal Investigator: Simon Geist
Conflict of Interest: None
Primary reviewers: Silva and Costa
Project title: Metabolic rate experiments to optimize rearing and restocking protocols, focus southern flounder
Protocol type: Animal Research Protocol

Protocol Summary: This project aims to improve the standard operating protocols for the rearing and restocking of Southern Flounder and Spotted Seatrout for the TPWD stock enhancement program. As an integrative health parameter, the response of metabolic rate to different temperature and salinity levels in larval and early juvenile stages from the different brood stocks used in TPWD hatcheries will be measured. The gained information on energy demand and physiological stress will allow to refine and optimize rearing conditions and feeding regime and improve site and time selection of the restocking operations. The optimization of standard rearing protocols aims to increase survival rates of larvae and juvenile fish both during the rearing process and after release in the field increase to further improve the efficiency and impact of the Stock Enhancement program as a fisheries management tool.

CR update: Experiments were conducted in continuation of the proposed treatment levels. Project milestones were the completion of larval testing and the completion of the second treatment level of size 1 juveniles.
Adverse Events reported? No
Alternatives to Animal Use? No
Alternatives to Potentially Painful Procedures? No
Not Unnecessarily Duplicative? Yes

CITI verified - Yes OHP verified - Yes

Discussion: No adverse incidents were reported. No alternatives to animal use. No alternatives to potentially painful procedures. The reviewers and committee members agreed with the continuing review submission.

The Chair invited additional comments, questions, and/or concerns. Having none, the motion to approve was made, seconded, and carried.

Vote yes: 8 Recused: 0
Vote no: 0 Excused: 0
Abstain: 0

IACUC Number: TAMU-CC-IACUC-2020-07-006
Principal Investigator: Jennifer Pollack
Conflict of Interest: None
Primary reviewers: Sparks and Lloyd
Project title: Coastal Conservation and Restoration Ecology-Collection of Mobile Estuarine Nekton
Protocol type: Animal Research Protocol
Protocol summary: Estuarine and coastal habitat occur in transitional zones where fresh and saltwater mix, making them highly productive and critical to coastal fisheries, but subjecting them to frequent hydrological variation. Changes in environmental conditions can act as a disturbance, altering the structure of ecological communities via physical, biological, and physiological stresses. Broadly, our research aims to better understand (1) the relationship between changing abiotic conditions and their effects on biotic communities, (2) the role of human activities and natural (i.e., storm, climatic) disturbances on ecological structure and function, and (3) the ability of habitat restoration to replace ecological functions lost due to habitat degradation. It is important to understand these relationships between environmental conditions, habitat, and biotic communities to inform effective management strategies.

CR update: These studies are ongoing, and methods have not changed since the initial submission. We continue to monitor anthropogenic and climate-driven changes on coastal and marine ecosystems using field collections of water quality and faunal populations to help guide effective resource management decisions.

Adverse Events reported? No
Alternatives to Animal Use? No
Alternatives to Potentially Painful Procedures? No
Not Unnecessarily Duplicative? Yes

CITI verified – Yes OHP verified - Yes

Discussion: No adverse incidents were reported. No alternatives to animal use. No alternatives to potentially painful procedures. Permit states 5000; PI is getting close to the allowed amount on the permit, although they have not exceeded the permit it allowed number. The reviewers and committee members agreed with the continuing review submission.

The Chair invited additional comments, questions, and/or concerns. Having none, the motion to approve was made, seconded, and carried.

Vote yes: 8 Recused: 0
Vote no: 0 Excused: 0
Abstain: 0

V. Other

June inspection update: Research lab inspections will be completed no later than June 16, 2021. The date and time will be emailed to members.

VI. New business

Software update – Provided an update on the RedCap implementation process. What to look forward to and what the PI's can do to assist in the implementation process. Assist by securing the study personnel University Identification Numbers (UIN's) and ask students to update their CITI accounts with a TAMU-CC email address.

The next meeting is scheduled for Friday, July 16, 2021, from 1:00 to 3:00 pm.

The meeting adjourned at 2:03 pm.