Scientific Projects and Collections Application Form

2012 AI

Project Title:

Bitter Crab Syndrome (Pathobiology Milestone #2)

General Description and Justification

Bitter Crab Syndrome (BCS) is a fatal disease of commercially important *Chionoecetes* species of the North Pacific and is emerging worldwide in other decapod hosts. We would like to investigate presence of BCS in crustacean, using an opportunistic sampling plan.

The proposed project has implications for the following AFSC research priorities:

 a. Investigate the role of pathogens and parasites in vitality of marine fish and shellfish populations & as biomarkers of anthropogenic and environmental change on stock health b. Develop DNA-based genetic baseline data for selected species of groundfish and forage fish to establish stock structure and stock boundaries

 c. Assist in implementing and improving data collection programs that support economic and social research

d. Samples could also provide additional information of disease dynamics in an area that is potentially experiencing considerable environmental change in association with climate change.

Requestor/Point of Contact:

Frank Morado

Frank.Morado@noaa.gov

206-526-6572

AFSC - RACE

IDENTIFYING THF SURVEY.

Please select a survey.

Aleutian Island Survey

Identifying the Geographical areas of your collection

AI – Western, AI – Eastern, AI - Central

Is the area of your collection more restricted than the general subareas listed above?

NO

IDENTIFY THE TYPE OF DATA COLLECTION

Select the category that best describes your collection

Biological specimen

# Does your request include fish, invertebrates, or both?

Invertebrate

Identify species:

Chionoecetes spp., Paralithodes spp., Hyas spp., Pagurus spp.

IDENTIFY SAMPLING METHOD

Subsample

Selective

Identify the selective criteria to be used when subsampling:

Dominant species randomly selected when opportunistically caught. IF this survey includes a Pathobiology staff member, we will collect these samples. IF this survey does not include a Pathobiology staff member, please DISREGARD this special project request.

Maximum Quantity of specimen requested:

Up to 500 total samples (one leg, one boat of AI survey, patho only)

Include haul information with your collection?

No – I have no need to link my collection with haul level data

Detailed Collection Procedures:

What: Hemolymph from the crustacean species when available, randomly select at least ten but up to twenty specimen, or may require opportunistic sampling

When: After routine haul duties, ONE leg of AI survey, ONE boat only

Who: Pathobiology staff member will take collections.

Collection methodology: Record species, sex, shell condition, morphometry, visual BCS status, plate #, vessel, cruise and haul. Using a syringe draw 0.2mL hemolymph from the arthrodial membrane. Preserve hemolymph sample in 100% ethanol stored in pre-filled 96-well plates. Dispose needle in sharps container and syringe in hazmat bag.

Estimated Time & Personnel Needed to conduct project:

One person and 30 minutes after routine survey tasks are completed

List of supplies:

We will provide 500 1mL syringes, calipers, 5 96-well plates, sharps containers, biohazard bags, datasheets, shipping materials

Hazardous Materials:

Ethanol

24/7 Contact Name, number:

Christie Shavey, 206-554-1755

Detailed shipping instructions:

We will use the AFSC shipping van to and from Alaska. Ethanol packaging conforms to DOT & IATA for Excepted Quantities requirements, proper labeling is required, but shipping papers are not required. Shipping containers for ethanol include Inner sturdy plastic receptacles (96-well plates containing ethanol at 0.8mL/well and sample individually contained in resealable plastic bags with absorbent spill pad) inside a DOT approved 5-gallon twist top bucket. Used syringes will be transported in biohazard bags to be autoclaved and disposed of at AFSC. Used needles will be contained in sturdy sharps containers and disposed of at AFSC.

# PERMITS

ADF&G Fish Resource Permit