

**Survey Request ID:**

62

**Date Created:**

3/6/2012 2:34 PM

**Submission Complete:**

Yes

**PROJECT TITLE:**

Bitter Crab Syndrome in the North Pacific Chionoecetes spp.

**GENERAL DESCRIPTION AND JUSTIFICATION (500 words max):**

**Please provide a succinct (500 words maximum) description and justification for your proposed project or collection. Please be sure to detail the goals of the project, how the data or specimens will be used, and why it is important for this project to take place at this time (opposed to during future surveys, other available research platforms, etc.).**

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. A major decline in the abundance of legal sized snow crabs has occurred in the eastern Bering Sea (EBS) and the fishery has experienced frequent closures since 1996 due to low abundance. Approximately 250 stations will be pre-selected for sampling as part of an ongoing study on this disease. The sampler will collect hemolymph by syringe from 10-20 crabs of the dominant Chionoecetes species at each designated station completed by the vessel with Pathobiology staff (approximately half of the designated stations). Hemolymph will be preserved in 100% ethanol.

**REQUESTOR/POINT OF CONTACT FIRST NAME:**

Frank

**REQUESTOR/POINT OF CONTACT LAST NAME:**

Morado

**E-MAIL:**

frank.morado@noaa.gov

**DAYTIME TELEPHONE#:**

206-526-6572

**AFFILIATION OF REQUESTOR**

AFSC - RACE

**IDENTIFYING THE SURVEY.**

**Please select a survey. One per application.**

2012 Eastern Bering Sea Continental Shelf (EBS-SHELF)

**IDENTIFYING THE GEOGRAPHIC AREAS FOR YOUR COLLECTION.**

**Each survey, except the Chukchi survey, is divided up into major geographic subareas. Please check all the subareas that apply to your collection. For descriptions of survey subareas please see the application instructions.**

EBS-SHELF: Southeast region, EBS-SHELF: Northwest region

**IS THE AREA OF YOUR COLLECTION MORE RESTRICTED THAN THE GENERAL SUBAREAS LISTED ABOVE?**

**If 'yes', please provide the bounding coordinates of your collection area (latitudes and longitudes in decimal degrees) in the fields below.**

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.**

**Please provide the scientific name. Multiple names may be pasted if the collection protocol is the same.**

Chionoecetes opilio, Chionoecetes bairdi, Paralithodes platypus

**What type of specimen data do you want collected?**

pathology

**IDENTIFY SAMPLING METHOD.**

**It is important for our staff to know how often to collect for your project and if there are any criteria for selecting specimens. In the following pages, you will be asked to provide this information.**

Subsample (there are criteria for selecting specimens.)

**IDENTIFY HOW TO SUBSAMPLE FOR YOUR COLLECTION**

Please select a subsampling method for your collection. Selective = specimens will be selected based on criteria that are set by you in following pages. Random stratified = specimens will be randomly selected out of each strata that you designate in the following pages. random = your specimens do not need to meet any set criteria and so will be randomly selected across the collection area.

selective (examples: select only those specimens from a specific size range, depth or that are intact, and photogenic;

#### IDENTIFY THE SELECTIVE CRITERIA TO BE USED WHEN SUBSAMPLING.

examples: select only those specimens from a specific size range; specimens that are intact, good condition, photogenic; caught in tows from a specified depth

Dominant species randomly selected at pre-assigned stations (when available). Approximately 125 stations for all 3 legs of the survey, one boat only.

#### MAXIMUM QUANTITY OF SPECIMENS REQUESTED

up to 2500 total samples (~800 per survey let, one boat only)

#### INCLUDE HAUL INFORMATION WITH YOUR COLLECTION?

Linking your project data to haul level data (haul position, depth, trawl temperature, etc) requires that Cruise, Vessel, and Haul numbers be included each time your samples are collected. Any forms provided by you must contain those fields. Haul level data will be e-mailed to the the requestor when survey data are finalized after the end of the field season (usually by October of the same calendar year).

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

#### DETAILED COLLECTION PROCEDURES:

Provide a detailed description of collection procedures and list of special forms and equipment that will be required. Be as specific as possible and include the desired sampling location(s).

What: Crab hemolymph from *Chionoecetes opilio*, *C. bairdi* and *Paralithodes platypus* Where: Pre-assigned stations When: After routine haul duties Collection Methodology: Randomly select at least ten but up to twenty specimens of the dominant species. Record crab species, sex, shell condition, morphometry, visual BCS status, plate number, vessel, cruise, and haul. Using a syringe, draw 0.2mL hemolymph from an 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 TO NEEDED TO CONDUCT PROJECT:

Provide an accurate estimate of the amount of time and people needed to collect your project data. For example: 2 people and 15minutes every every haul; one person and 30 minutes whenever a particular species comes up in the net. One person and 1 hour at the beginning and end of the survey.

One person and 30 minutes at pre-assigned stations

#### LIST OF SUPPLIES:

Provide a list of all supplies needed for your project or collection. The person making the request is responsible for providing or arranging for all needed supplies including chemicals. Small quantities of some supplies, such as sample bags, freezer boxes, and standard chemical like ETOH and formaldehyde may be available, but applicants must arrange this specifically with survey contact(s) prior to the start of the survey).

We will provide: 2500 1mL syringes, 25 collection plates, calipers, sharps containers, biohazard bags, datasheets, shipping materials

#### HAZARDOUS MATERIALS:

Select or describe any hazardous materials used for your project. Please include MSDS's with your application for chemicals other than formaldehyde, ethanol, glycerol/thymol.

Ethanol

#### 24/7 Contact Name:

Christie Shavey

#### 24/7 Contact Phone Number:

206-554-1755

#### Detailed shipping instructions:

We will use the AFSC shipping van to and from Alaska. Ethanol packaging conforms to DOT & IATA requirements, proper labeling and shipping papers are 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 & IATA approved for liquids 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 issued or pending:

ADF&G Fish Resource Permit