

Figure 1: Vicinity map created in ArcMap version 10.0 using geo-referenced digital NOAA Nautical Chart #13316.

Location: Goose Cove, Trenton, Hancock County, Maine.

Purpose: Experimental suspended and bottom culture of Quahogs (*Mercenaria mercenaria*).

Site Review by: Jon Lewis and Marcy Nelson
Report Preparation by: Jon Lewis and Marcy Nelson

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On October 17, 2012 Maine Department of Marine Resources (MDMR) Scientists Jon Lewis and Marcy Nelson visited the proposed experimental aquaculture lease located in Goose Cove, Trenton.

WAAS (Wide Area Augmentation System) GPS was used to navigate to each corner of the proposed lease site.

Application Coordinates – 1.98 acres (Figure 2)

<u>Corner</u>	<u>Latitude</u>	<u>Longitude</u>
NW	44° 25' 49.614"N	68° 23' 21.807"W <i>thence 208 feet at a bearing of 163°T to:</i>
SW	44° 25' 47.650"N	68° 23' 20.969"W <i>thence 416 feet at a bearing of 073°T to:</i>
SE	44° 25' 48.851"N	68° 23' 15.486"W <i>thence 208 feet at a bearing of 343° T to:</i>
NE	44° 25' 50.815"N	68° 23' 16.324"W <i>thence 416 feet at a bearing of 253° T to NW.</i>

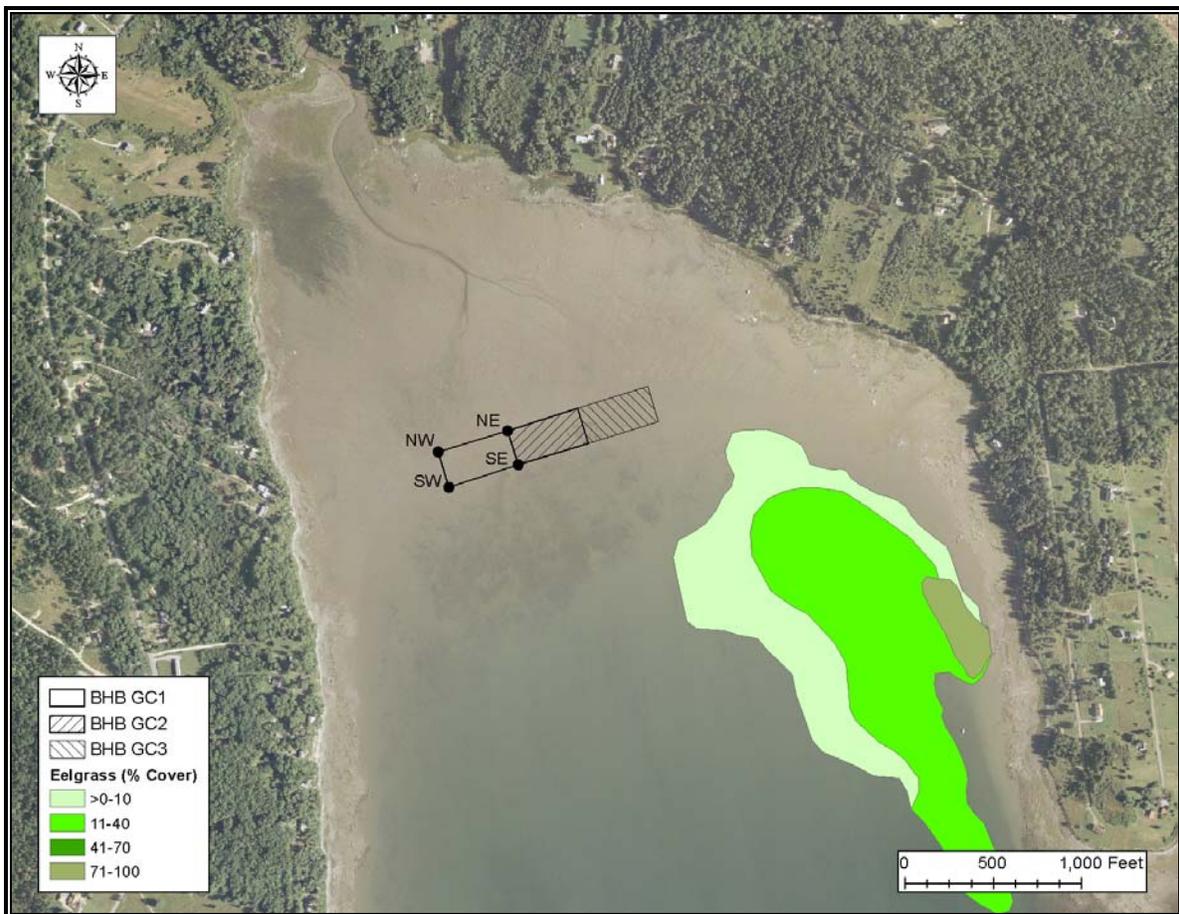


Figure 2: Vicinity map created in ArcMap version 10 using geo-referenced aerial photographs taken at low tide (2008) and provided by The Maine Office of GIS. Eelgrass data are from 2008 and were provided by the Maine Department of Marine Resources, Bureau of Resource Management.

The applicant is requesting modification of his existing lease, BHB GC1, to allow for the deployment of predator netting. According to the application each netted plot would have dimensions of $\leq 14' \times 22'$ and protrude approximately 5" above the benthos. Nets would be anchored by burying the edges in the sediments or staking at the corners. The applicant anticipates as many as 50 netted plots within the boundaries of the proposed lease (see application page 17).

Since 2008 the applicant has cultured quahogs in this same location by free-planting the shellfish directly on the sediments. Presently, Mr. Porada has two adjoining leases that are approved for the use of predator netting (Figures 1 and 2). If granted, the use of predator netting would be extended an additional 416 feet to the west of what is currently allowed.

The proposed modification is likely to have little additional impact. At Mean Low Water (MLW) navigation to the north of the proposed lease is impeded by extensive tidal mudflats. At higher tidal stages more than 800 feet of water remains between the western boundary of the proposed lease/BHB GC1 and the nearest point of land. Furthermore, shallow draft vessels, canoes, and kayaks will be able to transit over the netted plots at high water. While navigation in and out of the cove is infrequent due to the shallow depths, the potential for entanglement in boat propellers and sailboat keels exists. If granted, some provision for notifying vessel operators of this potential entanglement should be provided.

At the time of MDMR's assessment the existing leases appeared well maintained; no errant gear or navigational hazards were observed. Furthermore, the Department has received no complaints about the applicant's existing aquaculture lease sites in Goose Cove.

An eelgrass meadow of varying densities is located approximately 1,000 feet to the southwest of the proposed lease area (Figure 2). The addition of predator nets to the westernmost of the applicant's three lease sites may increase sediment resuspension and turbidity during times of harvest. This activity is likely to be irregular and infrequent and have little additional impact.