Completeness Report for New Hampshire Sea Grant R/FMD – 166, "Land-Based Aquaculture for the Green Sea Urchin: Transitioning Technology to the Private Sector".

A.

1. **How well were the objectives of this proposal met?**

   All objectives of this study that were supported by Sea Grant were completed.

2. **New research directions identified during the course of this study.**

   This Sea Grant supported project provided funds that supported our preliminary, small scale laboratory efforts to suppress gametogenesis in the green sea urchin using invariant photoperiod. Based on success of these efforts, we obtained funding from USDA/NRI Competitive Grants (NHR-03315) and from the Northeast Regional Aquaculture Center to continue our efforts at devising methods for suppressing gametogenesis in the green sea urchin, including developing triploid urchins.

3. **Discussion of problems identified during this study.**

   The major problems identified during this work related to convincing participants in the industry to try out our land-based methodology.

B.

1. **New research that has resulted from this study.**

   Same as above in A.2.

2. **Publications and manuscripts to date (including in prep).**


Moody ML, Lesser MP, Carelton CL, Barry TM, Walker CW (in prep) Urchin Tube Feet are Non-Ocular Photoreceptors.


3. Names and majors of students supported.

Graduate Students:

Nature A. McGinn – Zoology MS student
Laura A. Harrington – Zoology MS student
Michelle L. Moody – Zoology MS student

Undergraduate Students:

Fifteen undergraduates in Biochemistry, Molecular, Cellular and Developmental Biology, Marine and Freshwater Biology, General Biology and Zoology were supported by this project.

4. Titles of theses completed.
