Generic oyster sampling protocol – December 2013

Collecting samples of unexplained mortality in oysters

Oysters may be sampled by oyster farmers or by NSW DPI staff. The following describes the protocol for packaging samples and preparation of accompanying information for diagnosis at the Elizabeth MacArthur Agricultural Institute (EMAI) laboratory.

1. Sample preparation

Only living oysters are to be sampled from cultivation units (trays, baskets, cylinders, etc) that are experiencing the greatest mortality. This is to ensure that samples are representative of the mortality, rather than of recovered or unaffected individuals. Ideally, ‘spongy’ oysters, or those appearing weaker and emitting bubbles/water from the shell when pressed are collected. Collect 20 representative affected for submission.

Samples must be kept alive, ideally placed in a mesh bag in a polystyrene esky with a frozen ice brick or ice. DO NOT freeze samples. Any costs associated with the procurement of equipment should be charged to code BIO7-11 (Exclusion of Notifiable Disease).

If collecting samples from multiple oyster leases, bag and label oysters from each lease separately.

2. Accompanying information

Print a copy of the Veterinary Laboratory Specimen Advice form, see below. This form must be placed in a zip-lock bag and accompany the samples. If possible, an additional copy should be attached to the outside of the esky.

Identify the submitting oyster farmer and contact details in the “Owner” field of the form, and Aquatic Biosecurity in the “Submitter” field. Specify “PCR and Histopathology” in the “Test Requested” field. Upon receiving the report or when collecting samples, provide the following additional information in the form:

- Oyster Lease number of the lease from which oysters were sampled and indicate the area the lease is located within the estuary
- The species, age (specifying how this is defined, e.g. age of spawning or since obtained from a hatchery) and size of oysters (showing range where relevant), indicating whether diploid or triploid
- A mortality estimate (%) and note any details about how the mortality occurs across the lease (e.g. patchy across lease; or greater mortality towards one end of the lease, e.g. the downstream end; more mortality in larger oysters; greater mortality in hatchery vs wild caught; etc)
- When the mortality was first noted, and when the stock was last checked
- The type of cultivation units used (trays, baskets, cylinders, sticks, etc) and any information regarding husbandry (e.g. what invert the units are set at)
- The source of the oysters (e.g. hatchery or wild caught)
- Any recent significant environmental conditions or pollution events

3. Organise Courier

Metrostate is the preferred courier for sending samples to EMAI. Call Metrostate as soon as it is known when samples will be ready for collection (even prior to sample preparation if possible) on (02) 4964 4315 if in the Port Stephens/Newcastle area; or (02) 9645 9700 for Sydney and regional areas. Advise Metrostate that sample is to be taken to EMAI Menangle, and should be charged to the EMAI account.

Print the Veterinary Laboratory delivery contact details page, see below, and affix to the outside of the sample esky.

Note: No consignment note is required when sending with Metrostate, as costing is completed by EMAI administration.

4. Notify Laboratory

Notify EMAI of pending oyster submission, providing an estimated time of arrival and the number of oysters in the sample. Either:

a. Contact the EMAI switch on (02) 4640 6333, ask to be put through to the Specimen Receipt Desk and notify the officer, asking them to notify the Duty Pathologist; OR
b. Contact Veterinary Officer, Jeffrey Go, on (02) 4640 6310 who will liaise with lab staff