HARVESTING & SHEDDING EUROPEAN GREEN CRABS

FIELD OPERATIONS & HUSBANDRY BEST PRACTICES MANUAL • SHELL & CLAW (YORK, ME)

1 FIELD HARVEST & TRAPPING

Seasonal Timing & Water Temperature: Target mid-to-late May into early June for peak fishing. Water temperatures approaching 60°F trigger the highest percentage of pre-molt crabs before peak wild molting occurs. During this brief window, roughly 10% to 15% of the total catch will consist of pre-molts.

Bait Strategy: Bait quality directly impacts catch rates. Fresh, unsalted bait like fresh herring or mackerel yields significantly better results than low-quality or salted bait. Using high-quality fresh bait is well worth the investment to maximize overall harvest.

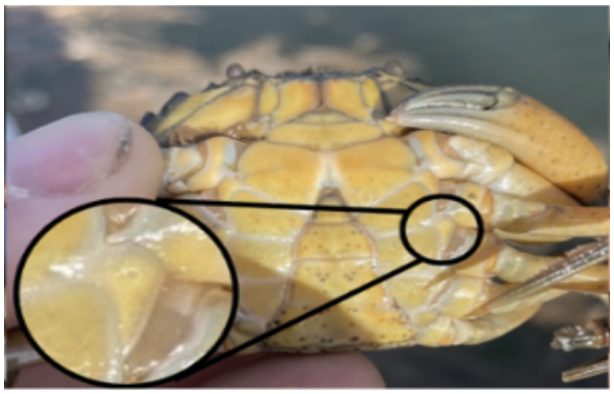
Traps & Location: Trapezoidal green crab traps are optimal, but any trap with a small mesh (like eel traps) will work fine. Deploy traps along the low intertidal zone near the Mean Low Water (MLW) mark in shallow estuaries and riverbanks. Avoid deeper bottoms populated by rock crabs and lobsters, as their presence deters green crabs from entering traps.

2 SORTING & PRE-MOLT SELECTION

Selection Standards

- **Males Only:** It is really only worth your time to sort for male crabs. Males have a much more concentrated molt window (mid-June through July), whereas females molt sporadically throughout the year.
- **Target Size:** Focus primarily on crabs with a carapace width of 2 to 3 inches. While smaller crabs can be collected, larger ones are preferred as they yield enough soft-shell meat to be commercially viable.
- **Female Disposition:** Route all female crabs directly to commercial bait processing (freeze and pack). It is not worth holding onto females.

Identifying Pre-Molts ("The Halo"): To identify pre-molt males, inspect the underside of the crab along the episternites. Look for a light outline or "halo" tracing 2 or more episternites. Crabs showing this halo should be transferred to bulk storage on longlines and checked 1 to 2 times per week to monitor progression.



Premolt crab halo. *Example of the light outline ("halo") used to identify a pre-molt male.*

3 BULK HUSBANDRY & HANDLING

Handling & Stress Minimization: Minimize handling and rough sorting whenever possible. Physical jostling and stress cause limb loss, and crabs missing legs suffer from higher mortality rates and produce a lower-grade product.

Longline Storage & Crate Setup: Store bulk pre-molts in lobster crates tethered along longlines within an approved aquaculture lease area to ensure continuous water flow. Modify crates by attaching bottom runners to keep them elevated off docks and boat decks, which prevents crab legs from protruding through the vents and snapping off.

Density Cap: Maintain 10 to 15 lbs of crabs per crate. Exceeding 15 lbs smothers crabs at the bottom and can induce stress and mortality. Operating at scale requires significant lease space to accommodate volume.

OPERATING TARGET
10–15 lb of crabs per crate • continuous water flow • minimize handling • prevent legs from protruding through vents

SHEDDING CONDOS & HARVEST PROTOCOL

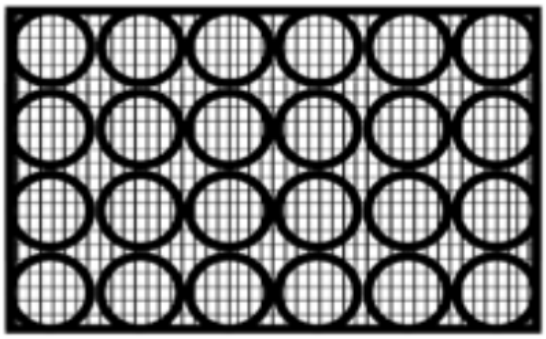


Diagram of top view of condo. *Each layer contains 24 units, totaling 72 individual units per crate across three layers.*

Condo Isolation & "Busters": When crabs reach the "buster" stage—showing a visible seam or crack along their carapace—they are about to molt and must be moved immediately into individual condo compartments. Isolation is mandatory because soft-shell crabs release scents that trigger cannibalism from other crabs.

Inspection Schedule & Active Molts: Ideally, check condo trays 3 times daily (morning, midday, and evening). Checking can be pushed to 2 times daily if necessary, but crabs should never sit for more than 12 hours after molting, as they will begin calcifying into paper shells. Never force or assist a crab in the middle of a molt. Allow freshly molted soft-shells to rest undisturbed in the water for at least 30 minutes to stabilize before handling.

Post-Harvest Storage & Chilling:

- **Harvest Handling:** During harvest, crabs can remain in a holding bucket of water for up to 20 to 30 minutes, but no longer. Avoid leaving them exposed out of water in direct sun.
- **Packing & Rockweed:** Arrange soft-shells in a single layer inside shallow trays lined with damp rockweed.
- **No Stacking:** Never stack soft-shell crabs on top of one another, as their soft carapaces rupture easily under weight.
- **Refrigeration:** Store trays at standard refrigeration temperatures (34°F–38°F). Properly chilled soft-shell crabs retain market quality for up to 7 days.

FIELD QUICK CHECK
Premolt halo → longline bulk storage → buster seam → individual condo → inspect 2–3× daily → recover soft-shell after stabilization → single-layer chilled storage.

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