## Freshwater gold clam (Corbicula fluminea)

Biosecurity New Zealand Ministry for Primary Industries Manatū Ahu Matua

The freshwater gold clam (also called the Asian gold clam or Asian clam) is a small shellfish that reproduces rapidly, forming large groups that can clog water pipes and out-compete native species. It was first found in May 2023 in the Waikato River at Bob's Landing near Lake Karāpiro.

## About the freshwater gold clam

This shellfish is native to eastern Asia but has become widespread in North and South America and Europe where it has become a pest, breeding rapidly, forming large groups and clogging up electric generation plants, irrigation systems and water treatment plants. They can potentially compete with native species for food. However, we do not yet know how this species will respond in New Zealand conditions.

Overseas, the freshwater gold clam has proved difficult to control and eradication has never been achieved.

Biosecurity New Zealand is partnering with mana whenua, the Waikato River Authority, the Waikato Regional Council, Te Papa Atawhai Department of Conservation and Toitū Te Whenua Land Information New Zealand to understand this incursion and how best to respond to it. Currently we're building a picture of where this clam is.

## Help us find the freshwater gold clam

Look out for these unusual clams. There are no other New Zealand freshwater shellfish that look anything like this in the Waikato River.

The adult clams are 2-3cm in length and are typically dirty white, yellow or tan in colour. They have an obvious ribbed texture on the shell.



Freshwater gold clam with coin for scale – Photo: Tracey Burton, Toitū Te Whenua Land Information New Zealand

Freshwater gold clams are found in freshwater or brackish water (near river mouths), sitting on top of sandy or muddy surfaces, or buried shallowly within them. You may see their shells partly exposed, or syphons (their breathing tube) sticking out from the sediment. They can also be found among debris, such as leaves, that may have settled on the riverbed. At Bob's Landing, juvenile shellfish and larvae have been found attached to rocks.



Freshwater gold clams on the riverbed at Bob's Landing, Waikato River – Photo: Tracey Burton, Toitū Te Whenua Land Information New Zealand

### If you find freshwater gold clam

- note the location
- take a photo if possible of the clams and also the area around them
- contact Biosecurity New Zealand on 0800 80 99 66
- or complete the online reporting form at <u>https://report.mpi.govt.nz/</u>

#### Do not eat freshwater gold clam

These small shellfish filter-feed and eat deposits from the river or lake bed. Because of this, they can accumulate toxins in their gut.



## Help stop spread – Check Clean Dry

If you fish, swim, boat or row in the Waikato River, follow the Check Clean Dry guidelines to help stop the spread of this clam to other rivers and lakes.

Before moving to another location at the river, or to another river or lake:

#### Check

Remove any visible matter, including any clams you can see, along with plant material or mud. Drain all river water.

#### Clean

Do a washdown of your gear and watercraft with tap-water onto grass, beside the waterway or at home and not into a stormwater drain system. This will flush off clam larvae, which can be too small to be seen.

For gear made of absorbent materials, which will stay wet longer, apply a cleaning treatment (see Treatment Options table, right).

#### Dry

Allow gear to dry to touch, inside and out, then leave it to dry for at least 5 days.

Dry areas inside the watercraft where water has pooled, for example with an old towel, and then leave the craft to dry for at least five days. The hull of a watercraft will dry when towed.

# Treatment options for gear made of absorbent material:

Hot water	Above 45°C for 5 minutes (about the heat needed to wash dishes)
<b>Freezing</b> (for small absorbent items such as booties, clothing and wetsuits)	Until solid (as the clams have a thermal tolerance of 2°C)

#### Other treatment options if needed:

Broad-spectrum disinfectants	5-minute soak in a 2% solution of Virkon® Aquatic (effective for juveniles). (This is a more costly option.)
Steam cleaning	Steam of 100°C or above for at least 30 seconds, on the clams between 3cm and 4cm from the steam source. Be careful with your gear.

Note: The Check Clean Dry advice may be adjusted as further technical information becomes available. Refer to the manufacturer's instructions for gear and any commercial treatments.

For more information, including any updates, visit: <a href="http://www.biosecurity.govt.nz/clam">www.biosecurity.govt.nz/clam</a>



