Notes from MPSC for the period April 2024 – November 2024

The Marine Pest Sectoral Committee (MPSC) held its 28th Committee Meeting and Partners’ Workshop via hybrid[[1]](#footnote-1) format in Adelaide, South Australia, on 5-6 November 2024.

# From the Chair

I am pleased to introduce myself as the new co-chair of the MPSC, alongside Dr Bertie Hennecke from the Chief Environmental Biosecurity Office at the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF). This was my first meeting as co-chair, and I want to take a moment to express my gratitude to MPSC members, observers, and partners for the warm welcome, as well as your constructive contributions at each MPSC session. Bertie and I look forward to working with you all during our tenure as co-chairs.

At the MPSC28 Partners’ Workshop we had an engaging range of presentations covering a variety of topics, including an update on the carpet sea squirt transition to management and research & development program, citizen science efforts supporting biosecurity surveillance and progress on the draft national in-water cleaning guidelines. We also heard about the implementation of the Ballast Water Management Convention in Australia, investigations into chemical cues for managing the northern Pacific seastar, and the exciting ‘Marine Invaders: Saltwater Country’ card game. Our MPSC Partners also shared updates on marine pest biosecurity issues and discussed the development of the next iteration of the MarinePestPlan.

During the Committee Meeting, we made significant progress on key MPSC priorities, including updates on the MarinePestPlan 2018-2023 review, development of emergency marine pest response manuals and the implementation of [National Marine Pest Surveillance Strategy 2021-2026 activities](https://www.marinepests.gov.au/what-we-do/surveillance/national-marine-pest-surveillance-strategy).

Cards with pictures on them for Marine Invader Card Game

**Shalan Scholfield**Co-chair MPSC28



**Photograph of Marine Invaders: Saltwater Country card game. Image credit: René Campbell**

**Photograph of Marine Invaders: Saltwater Country card game.** **Image credit: Elizabeth Copeland**

# MPSC28 Partners’ Workshop

The MPSC28 Partners’ Workshop was held on 5 November 2024. It was a great session, and we heard from a variety of speakers on important initiatives in marine pest biosecurity. Here are some key highlights:

* **Carpet Sea Squirt (*Didemnum vexillum*) Response:** DAFF presented on the transition to the national management of the carpet sea squirt, with coordination led by the MPSC. The national guidelines for managing this species will be shared with stakeholders by early 2025. You can find more information on the [Outbreak website](https://www.outbreak.gov.au/current-outbreaks/carpet-sea-squirt).
* **Research & Development Program:** Macquarie University gave an overview of a DAFF-funded research program aimed at understanding carpet sea squirt’s genetics, environmental tolerances, and its impacts in Australia. This collaborative research includes teams from Macquarie, Deakin University, Cawthron Institute, and the Department of Primary Industries and Regional Development, WA (DPIRD, WA).
* **Citizen Science in Biosecurity:** The Australian Citizen Science Association (ACSA) shared how citizen scientists have been supporting biosecurity efforts through the [Range Extension Database and Mapping Project (Redmap](https://www.redmap.org.au/)). Since 2009, Redmap has invited Australians to report sightings of uncommon marine species to help map their distribution.
* **In-Water Cleaning (IWC) Guidelines:** DAFF presented on the draft national IWC guidelines and the progress made in addressing regulatory challenges. These [guidelines](https://www.agriculture.gov.au/biosecurity-trade/aircraft-vessels-military/vessels/marine-pest-biosecurity/biofouling/inwater-cleaning-australia) are open for public consultation on the DAFF website until 1 March 2025.
* **Ballast Water Management Convention (BWMC):** DAFF updated us on Australia’s implementation of the BWMC, focusing on improving compliance, particularly in reporting and record-keeping. International efforts to enhance biosecurity in ballast water are currently being reviewed by the Marine Environment Protection Committee (MEPC).
* **Pheromone Traps for Northern Pacific Seastar:** Deakin University shared their project on using pheromone traps to manage the invasive northern Pacific seastar (Asterias amurensis). The goal is to use chemical cues to attract and concentrate reproductive individuals for easier detection and removal.
* **Marine Biosecurity Awareness:** The University of Waikato (NZ) launched the “[Marine Invaders: Saltwater Country card game](https://marineinvaders.com/products/marine-invaders-saltwater-country-nsw-version?srsltid=AfmBOorgXnRO6xaMgolvCTTnRBURP9uvj8jGMoC4WKpTLQoa5HAJ2xCk)” to help raise awareness about marine pests. This Australian version was developed in collaboration with the Wollotuka Institute, NSW, and Deadly Science, and follows the success of the New Zealand version.

We also heard updates from several MPSC partners, including Maritime Industry Australia Limited (MIAL), ACSA, Deakin University, Carnival Australia, Macquarie University, the Invasive Species Council, and the South Australian Research and Development Institute (SARDI).

Looking ahead, MPSC29 will take place in Western Australia in May 2025, and will follow the standard two-day meeting format.

# MPSC High Priority Work Items

Since MPSC27, MPSC has progressed the following high priority work items:

## MarinePestPlan 2018–2023 Review

The draft MarinePestPlan 2018-2023 review report has been circulated for marine pest biosecurity stakeholder comments by 20 December 2024. Two external webinars on the review will be held on the 13 and 19 November 2024. Stakeholder comments will be incorporated into the review report and then sent for endorsement in early 2025. The final review report will guide the development of the successor MarinePestPlan. The MarinePestPlan Scoping Group will engage stakeholders via workshops and other activities in order to identify the objectives and activities for the successor MarinePestPlan.

Information on MarinePestPlan 2018–2023 activities can be found on the [Marine Pests](https://www.marinepests.gov.au/what-we-do/publications/marine-pest-plan) website.

## National Marine Pest Surveillance Strategy 2021–2026

The National Marine Pest Surveillance Strategy outlines Australia’s national surveillance priorities and sets the strategic direction for investment in surveillance.

Implementation of the National Marine Pest Surveillance Strategy 2021-26 (Surveillance Strategy) is ongoing. Out of 15 activities listed in the National Marine Pest Surveillance Strategy 2021–2026:

* 2 activities have been completed.
* 12 have commenced.
* 1 has not commenced.

The Surveillance Strategy Task Group (SSI TG) compiled a list of priority marine pest species for surveillance which is available on the Marine [Pests](https://www.marinepests.gov.au/what-we-do/surveillance) website and will be updated as new priority species are identified.

More information on the status of National Marine Pest Surveillance Strategy 2021–26 activities can be found on the [National Marine Pest Surveillance Strategy](https://www.marinepests.gov.au/what-we-do/surveillance/national-marine-pest-surveillance-strategy) website.

## Emergency Response Task Group (EMPPlan)

The Marine pest response manual has been published on the [Marine Pests](https://www.marinepests.gov.au/what-we-do/emergency/response-manuals) website. The Response manual for invasive marine bivalves was endorsed by the MPSC. A revised bivalves manual draft will be prepared based on MPSC comments and prepared for publication in 2025. The draft Response manual for invasive ascidians is currently being developed.

**Communication, Education and Engagement Task Group (CEE TG)**

The Task Group is working on updating the list of marine pest education materials and resources developed by each jurisdiction and key partners to update the [OceanWatch educational resources database](https://www.oceanwatch.org.au/australia-marine-pests-educational-resources-database/). The CEE TG will focus on developing or tailoring marine pest training modules for various sectors, including schools and indigenous ranger programs, throughout 2025.

**Current Status of Marine Pest Task Group (CSMP TG)**

The task group is compiling a list of information sources, such as vessel trackers and access details, to develop a scenario for testing the National Guidelines on Determining the Current Status of Marine Pests. The CSMP TG is collecting data on vessel movements, focusing on both international and domestic patterns, to determine key ports or species for guideline development.

***Didemnum vexillum* Management Task Group update**

The *Didemnum vexillum* Management TG are reviewing the scope of the after-action review for the carpet sea squirt (*D. vexillum*) response. The Task Group plan to have an after-action review workshop early next year, with the possibility of additional workshops if needed.

# Jurisdictional updates

Since the last update at MPSC27, there has been progress on a range of marine pest biosecurity work across jurisdictions:

## Australian Government (AG)

* The Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) circulated the draft report for the MarinePestPlan 2018-2023 review, outlining the outcomes and next steps for the successor MarinePestPlan.
* DAFF progressed implementation of domestic and international ballast water management policies and international marine pest biosecurity collaboration.
* DAFF published an exposure draft of the Australian antifouling guidelines and in-water cleaning standards on the [DAFF website](https://www.agriculture.gov.au/biosecurity-trade/aircraft-vessels-military/vessels/marine-pest-biosecurity/biofouling/inwater-cleaning-australia) for public consultation until 1st March 2025.
* DAFF funded a research and development program on carpet sea squirt (*Didemnum vexillum*).
* DAFF has progressed response manuals as part of the EMPPlan series (see Emergency Response update above), and the draft Guidelines for marine pest surveillance which will be sent to MPSC for comment in 2025.
* DAFF’s Environmental Biosecurity Office (EBO) compiled border detection and incursion data for species on the [Exotic Environmental Pest List](https://www.agriculture.gov.au/biosecurity-trade/policy/environmental/priority-list#marine-pests) (EEPL).
* The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) released reports on potential ranges of carpet sea squirt (*D. vexillum*) and Suminoe oyster (*Magallana ariakensis)* in Australia. The reports are available at <https://www.agriculture.gov.au/abares/research-topics/biosecurity/biosecurity-sciences>.
* Under the Northern Australia Quarantine Strategy (NAQS), 34 Indigenous ranger groups conducted 141 surveillance activities. Additionally, the Northern Australia Biosecurity Strategy (NABS) contracted with Commonwealth Scientific and Industrial Research Organisation (CSIRO) for a ‘National Biodiversity DNA Library (NBDL)’ project.

## New South Wales (NSW)

* The New South Wales Department of Primary Industries (NSW DPI) changed name to the New South Wales Department of Primary Industries and Regional Development (NSW DPIRD) on 1 July 2024.
* NSW DPIRD is partnering with Carnival PLC on a grooming trial of the *MV Pacific Adventure*.
* Mid-program review of the NSW Marine Pest Surveillance Plan 2022-26 is nearly complete and bi-annual surveillance ongoing at various ports.
* NSW DPIRD investigated 26 suspected marine pest reports. Of these, 5 were confirmed and 5 were unconfirmed, all occurring in the areas where those pests were already known to be present. The remaining 16 were confirmed to not be species of concern.
* NSW DPIRD developed a new PowerBI dashboard to present surveillance results, surveillance location maps and target species posters.
* NSW DPIRD continues engagement through the Marine Biosecurity Awareness Project, NSW Marine Pest Working Group meetings, input into the “Marine Invaders: Saltwater Country” card game, and collaboration with SEA LIFE Sydney Aquarium on the Junior Marine Biosecurity Officer Program.

## Northern Territory (NT)

* The Northern Territory Department of Industry, Tourism and Trade (NT DITT) changed name to the Northern Territory Department of Agriculture and Fisheries (NT DAF).
* NT DAF collaborated with Australian Border Force (ABF), Australian Fisheries Management Authority (AFMA) and the DAFF to inspect apprehended vessels, ghost nets, and other fishing gears; provided disposal recommendations.
* 36 yachts have been inspected and treated for marine pest (March – September 2024) before entering high risk marinas.
* Asian green mussels (*Perna viridis*) were found on two vessels; both were securely cleaned under supervision.
* The [prawn translocation policy](https://industry.nt.gov.au/__data/assets/pdf_file/0016/1422313/nt-policy-movement-live-decapod-crustaceans.pdf) has been published. Oyster translocation policy and NT government response manual for marine pest is in progress.
* NT DAFF refreshed biosecurity training for Indigenous rangers, expanding activities with Aboriginal marine ranger groups.

## Queensland (QLD)

* The Queensland Department of Fisheries (QLD DAF) changed name to the Queensland Department of Primary Industries (QLD DPI).
* Active response for Asian green mussel (*P. viridis*) is underway in Weipa (the Gulf of Carpentaria); initial surveillance and assessment ongoing.
* QLD DPI is working with NAQS, port authority, Rio Tinto and local indigenous rangers to undertake surveillance and raise awareness for Asian green mussel in Weipa.
* QLD DPI continues data collection on the Suminoe oyster (*M. ariakensis*) detection in Moreton Bay to assess eradication feasibility.
* The Queensland Seaports eDNA Surveillance (Q-SEAS) program continues in collaboration with port authorities. QLD DPI also engages with indigenous ranger groups to support marine pest surveillance in remote northern Queensland.

South Australia (SA)

* The Department of Primary Industries and Regions, South Australia (PIRSA) responded to the detection of wakame *(Undaria pinnatifida)* in the southeast of South Australia.
* PIRSA are developing a risk assessment to prioritise ports and marinas for marine pest active surveillance and are progressing Marine Pest Surveillance Plan.
* In-water cleaning guidelines for South Australia are under development.

## Tasmania (TAS)

* The Department of Natural Resources and Environment, Tasmania (NRE TAS) launched marine pest awareness resources in October 2024 to support community reporting and capability building.
* The temporary moratorium on in-water vessel biofouling cleaning in Tasmania is expected to be concluded in the very near future; The new in-water biofouling cleaning policy has been drafted and should be released shortly.

## Victoria (VIC)

* The Victorian Department of Energy, Environment and Climate Action (DEECA) engaged over 3,000 students in marine biosecurity through the Junior Marine Biosecurity Officer program with SEA LIFE Melbourne Aquarium in May 2024.
* Ongoing removal programs for northern Pacific seastar (*A. amurensis)* and wakame (*U. pinnatifida).*
* Port surveillance program extended to four additional ports to assist South Australian Research and Development Institute’s (SARDI’s) DAFF funded study on twelve marine pest species, including carpet sea squirt (*D. vexillum).*
* DEECA are using the iNaturalist/ALA platform for environmental scanning.

## Western Australia (WA)

* The Western Australian Department of Primary Industries and Regional Development (WA DPIRD) continues work across marine biosecurity science, response, compliance, policy, and communications.
* The response to carpet sea squirt (*D. vexillum*) at the Australian Marine Complex (AMC) Henderson and HMAS *Stirling* continues with moderate resourcing as the response transitions to ongoing management.
* Surveillance activities continue through the State-Wide Array Surveillance Program (SWASP) at ten ports, Garden Island and Cockburn Sound, and the Indian Ocean Territories.

# Upcoming MPSC Meetings

## MPSC29

The 29th MPSC meeting and Partners’ Workshop will be held in Fremantle, Western Australia on 20 and 21 May 2025.

1. The MPSC uses a hybrid format to host its meetings and partners' workshops to enable participation from MPSC members, observers, and partners who are unable to attend in-person. [↑](#footnote-ref-1)