# SUBMISSION COVERSHEET

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ISC
Invasive Species Council
AUSTRALIA

# Submission
## Quarantine and Biosecurity Review

The Invasive Species Council is an NGO set up to conduct advocacy and education to improve policies, regulations and practices on invasive species issues. Our primary focus is the prevention of establishment and spread of invasive species that harm Australia's biodiversity.

We make a very brief submission here to highlight just a few of many issues that concern us about the current state of Australia's federal quarantine and biosecurity system. (We propose to discuss issues in more detail with the review panel during a planned visit to Brisbane.)

## Cultural issues

One of the major impediments to effective quarantine and biosecurity in Australia from an environmental perspective is the culture of AQIS and Biosecurity Australia. They often seem to be closed and defensive organizations unwilling to work cooperatively with other sectors and unable to accept constructive criticism. Biosecurity Australia seems overly bureaucratic and secretive and more concerned with protecting trade than with acting in the national interest, which includes protection of the Australian environment. While ISC is able to engage with state officers over invasive species issues, we have found it almost impossible to engage with BA officers, and our phone calls or letters have been ignored. Biosecurity Australia could do well to study the culture within Biosecurity Queensland (for example) and its healthy approach to other sectors.

There has long been a strong bias in biosecurity and quarantine towards invasive species of potential harm to agriculture over environmental weeds and pests. There is still insufficient focus on environmental risks and inadequate competency within Biosecurity Australia to assess and manage these risks.

The bias was highlighted when the WTO judged that Australia was not justified in banning imports of salmon because their quarantine policy was inconsistent - allowing

the entry of aquarium fish and herring bait, which carry far greater disease risks than salmon.

It was also exemplified in the very slow response of Biosecurity Australia to closing the loophole of Schedule 5 (which allowed the import of whole genera of plants rather than being species specific) - a major risk to Australia's environment (and economy). In addition BA sought to erroneously use WTO rules to avoid doing anything about the problem at all, and only acted in response to external political pressure. Another example of BA's failure to deal with priority environmental issues is that for years species identified as weeds of national significance were allowed to be imported. We have heard from insiders that there is a bureaucratic mindset within AQIS that doesn't want to hear about new pest problems because of the effort required to respond. AQIS employees periodically complain to us about fundamental systemic problems but do so in secrecy for fear of losing their jobs.

There is also bias when environmental risks are downplayed or ignored in assessments of species that have a commercial benefit or when there is political pressure to allow imports. For example, there has been considerable reluctance to revise the permitted list for aquarium fish, which includes many high-risk species, because of the opposition of the aquarium industry. Various import risk analyses – eg. a timber IRA – have never been completed or implemented, we suspect because of pressure from commercial interests.

There needs to be a significant change in culture and redirected and increased resourcing to prevent the introduction and spread of invasive species harmful to Australia's environment and economy.

# Failure to implement polluter pays approaches

As already noted, industries are enthusiastic about importing potentially harmful invasive species because they do not have to accept responsibility for the consequences of subsequent harm caused by their introduction. It should be a priority to implement a polluter pays approach for invasive species. For example, as required for mining in some states, a bond should be paid that is sufficient to fund future eradication/control efforts as a condition for importing or establishing species assessed above a certain threshold of risk. A ballast levy should be implemented - based on level of assessed risk - to fund research and management of marine pests. Importers at present are reaping the financial benefits of their imports but not paying the costs when pest problems are created.

# Insufficient precaution or priority in risk assessments

ISC acknowledges that a goal of 'no risk' is impractical given that international trade and travel will occur, and accepts the goal of very low risk. However, assessments of weed and pest risks are inherently difficult and subject to bias. While Australia has been a leader in instituting processes for risk assessments, our practices and implementation have been insufficiently precautionary.

Although ISC supports the assessment of invasiveness risk as a necessary basis for making decisions about which species should be permitted entry to Australia, we caution against simplistic assumptions that pests can be reliably predicted in advance. For example, basing predictions of future invasive potential on a plant's history of invasiveness fails to take into account differences that emerge when different genotypes are developed (to improve plant hardiness, for example) or when species are cropped or bred on a large scale. Species may well behave differently in a new environment, i.e. one that they have not been exposed to before such as in Australia, a change which is impossible to predict. Awareness of the inherent risk in allowing the entry of exotic species should permeate the culture of Biosecurity Australia and promote strong adherence to the precautionary principle.

Climate change will significantly increase the potential for weed and pest invasions, and renders many current and past assessments inadequate. There is an urgent need to update risk assessments to more fully account for all the ways in which future climate - e.g. warmer weather, more intense cyclones, more severe droughts - will affect the invasiveness potential of introduced species.

One of the major limitations of the risk assessment process is its narrow focus on species that are not yet present in Australia. Numerous harmful species are thus exempted from any assessment of their invasiveness potential, simply because they were brought into Australia prior to the implementation of risk assessments. This includes thousands of seed species in germplasm banks brought in by pasture researchers, which represent a very high-risk pool of exotic species. The narrow focus also precludes assessments of new varieties of plants, which are likely to have significantly greater invasive potential because they have been bred to improve hardiness or fertility or behave differently.

We acknowledge there are limitations on what Australia can do regarding species that already exist here because the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Standards does not allow the banning of weed species unless their distribution is limited and they are subject to an 'official control program', or if an importer wants to introduce a new strain that differs genetically such that it poses a greater weed risk than existing strains. However, the Australian quarantine service seldom uses even these limited provisions to ban existing weeds and pests.

Risk assessments are limited also in failing to require that proponents for import of exotic species demonstrate there are no suitable alternative non-invasive species already in Australia or that there is a public benefit in the importation of a new species.

The risk assessment process is often limited in practice because species can pass even if the response to some questions is 'don't know'. Species are often given the benefit of the doubt rather than the converse precautionary approach of treating all species as guilty unless proven innocent. Despite being an accepted part of Australian environmental law and policy the precautionary principle is viewed as an impediment within AFFA and Biosecurity Australia.

The development and implementation of import risk analyses have often been far too slow. For example, the Invasive Species Council is concerned that the risk analysis for importing edible fungi (with the environmental risk that hyphae could attack live wood and thus harm Australia's forests) was started in 1999 but has not yet been finalised. The most serious example of the low priority accorded to risk assessment was the very slow response of Biosecurity Australia to closing the major loophole which allowed whole genera of plants, including thousands of known weed species, entry to Australia.

# Lack of taxonomic expertise

There is currently insufficient expertise in BA staff to properly assess imports for the presence of undesirable species. This has been acknowledged for example with the import of aquarium fish (a particularly high risk import category). It requires a high degree of taxonomic expertise to distinguish between permitted and prohibited fish species and to assess for the presence of fish parasites or disease. Post-quarantine assessments of parasites on imported aquarium fish found a very high incidence of parasites.

The lack of even basic taxonomic competence was demonstrated when the high risk Mexican feather grass (*Nasella tenuissima*), a weedy relative of serrated tussock (*N. trichotoma*) - one of our 20 worst weeds - was allowed in because the importer unwittingly used an old name: *Stipa tenuissima*. Stipa was a permitted genus, *Nasel*la was not.

Lack of taxonomic expertise is a problem for state agencies as well. Funding for taxonomic research and employment opportunities for taxonomists have been declining for many years and Australia is now facing a taxonomic crisis, with many insect and plant experts approaching retirement age. The federal government should be funding career opportunities for a new generation of taxonomists across a wide range of disciplines.

# Inadequate pre- and post-border quarantine

It is well recognised that effective quarantine requires not only border controls but also pre- and post-border surveillance, monitoring and control. This is largely not occurring for invasive species of high environmental risk. For example, invasive tramp ants can seriously harm Australia's biodiversity (as well as the economy and way of life). Yet Australia is reacting to ant problems as they turn up (spending millions of dollars on control or eradication of fire ants, crazy ants, electric ants) but failing to take implement precautionary processes. Australia remains without any national strategy to tackle ants, which would involve pre- and post-border surveillance as priority strategies. The only way to effectively detect crazy ants is to monitor timber yards. The Queensland government is removing five small crazy ant infestations from South East Queensland, all of which can be traced back to timber supplies. But no surveillance is being done at any Queensland timber yards or their suppliers.

There is also very little attempt to work with countries of origin of high-risk plants and animals to assess risks and improve biosecurity arrangements. Again, the problem of tramp ants exemplify the importance of this approach. A study of tramp ant interceptions at Australian ports showed that most ants are entering from Singapore, New Guinea and Fiji. In all, 79 per cent of interceptions are from South East Asia or the Pacific - regions where quarantine standards are often lax. Australia is a major aid donor to New Guinea and the South Pacific, and we would benefit from funding offshore capacity in ant detection in control.

New Zealand has adopted this approach by providing financial support for the Pacific Ant Prevention Program (PAPP). Australia should be contributing to this program and working towards a similar program for South East Asia.

With its own interests in mind, New Zealand has also initiated the Pacific Off-shore Container Management Program. With co-operation from a shipping container company, containers at depots in Papua New Guinea and The Solomons were stored on 'hard-stand' areas rather than on soil, the storage areas were baited with ant toxins, the containers were washed, and residual insecticide applied. Before this programme up to 17 per cent of containers contained ants; the rate dropped to almost zero. Other recommendations to improve surveillance and capacity can be found in Australia's Threat Abatement Plan To Reduce the Impacts of Tramp Ants on Biodiversity in Australia and It's Territories.

Australia is at grave risk of importing *Eucalyptus* rust (also known as guava rust) from South America, where is it an endemic pathogen of Myrtaceae plants and infects eucalypt plantations. Its arrival in Australia would likely be devastating in its consequences for woodlands and forests. But as yet there is no strategy in place to prevent its incursion - a strategy that would prioritise working with countries of origin to prevent its export.

The Urban Hazard Site Surveillance Program, which surveys high-risk sites near ports, is one example of post-border quarantine in practise. But we have been told that this is likely to be wound up when it should be expanded in scope. And as Stanaway et al. (2001) advocate, Australian companies need to play a strategic role in pest risk management, as they do in fire ant zones in Brisbane. A more cohesive framework for pest management is also needed. Australia has a Vertebrate Pests Committee, a National Introduced Marine Pest Coordination Group, and an Australian Weeds Committee, but nothing dedicated to insect pests. State and federal laws on pests needs better harmonisation, and a national list of invasive plants should be produced.

## Eradication opportunities are ignored

Due to lack of national coordination and a culture of reaction rather than prevention, opportunities to prevent environmental harm from invasive species by surveillance and quick and or strategic eradications are being ignored. Australia needs a much stronger and coordinated capacity to detect and respond quickly to new and emerging invasions. The capacity exists for quick responses to livestock diseases but not to

environmental and social pests. There are numerous invasive species that could be eradicated before they spread to become serious pests, but little attention or funding is directed to this. Better harmonisation of policies between the states and federal government and a dedicated focus is needed to improve this situation.