

Should All Threat Abatement Plans Be Reviewed for Efficacy?

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1. Introduction



Over the past two decades, Australia has faced significant environmental challenges due to the introduction of invasive pest plants and animals. These species have caused widespread ecological damage, threatening native biodiversity and ecosystem health. In response, the Australian federal government has developed Threat Abatement Plans (TAPs) to mitigate the impacts of these pests. However, as environmental conditions evolve and new scientific knowledge emerges,

questions have arisen about the efficacy of existing TAPs. This paper examines whether all previous and current TAPs should be reviewed to assess their effectiveness and whether additional resources should be invested to ensure their success.

2. Background on Threat Abatement Plans (TAPs)

TAPs are strategic documents developed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to address key threats to Australia's native species and ecosystems. They outline actions to reduce the impact of invasive species, such as feral cats, rabbits, and weeds, on threatened biodiversity. For example, the latest TAP for feral cats aims to reduce their impact on native wildlife through targeted control measures and community engagement [1]. While TAPs have been instrumental in guiding pest management efforts, their longterm effectiveness remains a subject of debate.

3. Efficacy of TAPs: A Literature Review

3.1 Successes of TAPs

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TAPs have achieved notable successes in some areas. For instance, the TAP for rabbits has contributed to the reduction of rabbit populations through biological control methods, such as the



[2]. Similarly, the

TAP for feral cats has led to increased awareness and localized control efforts, particularly in areas with high conservation value [3]. These successes highlight the potential of TAPs to deliver positive outcomes when adequately resourced and implemented.

3.2 Limitations and Challenges

Despite these successes, TAPs face several limitations. A key challenge is the lack of consistent monitoring and evaluation, which makes it difficult to assess their overall impact [4]. Additionally,

many TAPs suffer from insufficient funding and resources, limiting their scope and effectiveness [5]. For example, the TAP for invasive weeds has struggled to address the widespread distribution of these plants due to limited funding for on-ground control measures [6].

4. Known Criticisms of Threat Abatement Plans

4.1 Community Pushback

One of the most significant criticisms of TAPs is the lack of community engagement and support. For example, the culling of feral cats under the TAP has faced opposition from animal welfare groups and some members of the public, who argue that the methods used are inhumane [7]. Similarly, landholders have expressed frustration with the lack of consultation in the development and implementation of TAPs, particularly when control measures affect their livelihoods [8].

4.2 Government-Level Challenges

At the government level, TAPs have been criticised for being overly bureaucratic and slow to adapt to changing environmental conditions. For instance, the TAP for invasive weeds has been criticised for its reliance on outdated risk assessment frameworks, which fail to account for the rapid spread of new weed species [9]. Additionally, there is often a lack of coordination between federal, state, and local governments, leading to fragmented implementation and inconsistent outcomes [10].

5. Global Comparisons of Similar Measures

5.1 Examples of Excellence



• This ambitious program aims to eradicate invasive predators, such as rats, stoats, and possums, by 2050. The initiative has been praised for its strong community engagement, innovative use of technology, and clear accountability mechanisms [11].

South Africa's Working for Water Programme:



This program combines invasive species control with job creation, providing employment opportunities for local communities while addressing the threat of invasive plants. It has been successful in restoring water resources and biodiversity [12].

5.2 Policies That Did Not Meet Expectations

- United States' National Invasive Species Council (NISC): Despite its comprehensive framework, the NISC has struggled to achieve its goals due to insufficient funding and a lack of enforcement mechanism s [13].
- **European Union's Invasive Alien Species Regulation**: While the regulation provides a strong legal framework for addressing invasive species, its implementation has been inconsistent across member states, leading to uneven outcomes [14].

6. The Case for Reviewing TAPs

6.1 Changing Environmental Conditions

Australia's environment is rapidly changing due to climate change, land-use changes, and urbanization. These shifts can alter the distribution and impact of invasive species, rendering some TAPs outdated [15]. For example, rising temperatures may expand the range of feral cats into previously unaffected areas, necessitating updates to the feral cat TAP [16].

6.2 Advances in Pest Management Technologies

Recent advancements in pest management technologies, such as gene editing and drone-based monitoring, offer new opportunities for more effective pest control [17]. Reviewing TAPs to incorporate these technologies could enhance their efficacy and ensure they remain aligned with best practices.

6.3 Stakeholder Engagement and Compliance

Effective implementation of TAPs requires strong stakeholder engagement and compliance. However, many TAPs lack clear mechanisms for involving local communities and land managers in their execution [18]. A review of TAPs could address these gaps by incorporating participatory approaches and strengthening compliance measures.

7. The Need for Increased Investment in TAPs

7.1 Resource Allocation and Funding Gaps

A common theme in the literature is the underfunding of TAPs, which limits their ability to achieve meaningful outcomes [19]. Increased investment is needed to support on-ground actions, research, and monitoring. For example, the feral cat TAP could benefit from additional funding for coordinated control programs and community education initiatives [20].

7.2 Monitoring and Evaluation Frameworks

Robust monitoring and evaluation frameworks are essential for assessing the effectiveness of TAPs and identifying areas for improvement [21]. Increased resources should be allocated to develop and implement these frameworks, ensuring that TAPs are evidence-based and adaptive.

8. Conclusion and Recommendations

The review of existing TAPs is essential to ensure they remain effective in addressing the evolving threats posed by invasive species. Increased investment in TAPs, particularly in monitoring, stakeholder engagement, and on-ground actions, is critical to achieving their objectives. HOPE recommends the following actions:

- 1. Conduct a comprehensive review of all TAPs to assess their efficacy and relevance.
- 2. Increase funding for TAP implementation, monitoring, and evaluation.
- 3. Incorporate new technologies and participatory approaches into TAPs.
- 4. Strengthen collaboration between government, researchers, and local communities to enhance compliance and outcomes.

9. Glossary

- **Threat Abatement Plans (TAPs)**: Strategic documents developed under the *Environment Protection and Biodiversity Conservation Act 1999* to mitigate the impact of key threats, such as invasive species, on Australia's biodiversity.
- **Invasive Species**: Non-native plants, animals, or pathogens that cause harm to the environment, economy, or human health.
- **Biodiversity**: The variety of life in a particular habitat or ecosystem, including species diversity, genetic diversity, and ecosystem diversity.
- **Feral Cats**: Domestic cats that have returned to the wild and pose a significant threat to native wildlife through predation.
- **Biological Control**: The use of natural predators, parasites, or pathogens to control pest populations.
- **Monitoring and Evaluation**: Systematic processes for tracking the progress and outcomes of programs or plans to ensure they are achieving their objectives.
- **Stakeholder Engagement**: The process of involving individuals, groups, or organizations affected by or interested in a project or policy.

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