



ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES

P.O. Box 20, MOSMAN, NSW 2088, AUSTRALIA

Telephone: 02 9969 7336

Email: office@rzsnsw.org.au

Website: <http://www.rzsnsw.org.au>

Land Management and Biodiversity Conservation Reforms
Office of Environment and Heritage
PO Box A290
Sydney South NSW 1232

20 June 2017

Comment on the NSW Biodiversity Reforms and Draft Biodiversity Regulations

The Royal Zoological Society of New South Wales (RZS NSW) is Australia's oldest and largest zoological society, comprising approximately 1100 members, including professional zoologists and ecologists and members of the broader community passionate about the conservation of Australia's unique animals.

The Society and our members have approached the draft biodiversity conservation regulations backed by a long history of interest in and involvement with the conservation of the fauna of NSW, through research, development of legislation and management plans, and through academic inquiry and dissemination of information. The current RZS NSW Council includes past or serving members on the NSW Scientific Committee as well as practising ecological consultants who are involved in undertaking biodiversity assessments.

Most of the concerns originally raised by the RZS NSW about the draft Biodiversity Conservation Bill (see <http://www.rzsnsw.org.au/advocacy>) remain pertinent to the draft Biodiversity Conservation Regulations and the various regulations, products and guidance documents on exhibition. The RZS NSW is disappointed that the earlier consultation on the *Biodiversity Conservation Act* has not resulted in significant, important and necessary change in the Act and the regulations.

The RZS NSW is particularly concerned that changes outlined in the Regulations will further reduce barriers to the clearing of native vegetation, which is the **key driver of biodiversity loss and species extinctions** in New South Wales (NSW). In addition, this issue is not ameliorated by the "like-for-like" offset requirement which is being relaxed in the new legislation and associated regulations. The extent of land clearing that has already occurred renders the "like-for-like" objective extremely unlikely to be met.

Further, RZS NSW believes that the interpretations of the perceived benefits of the shift to the *Biodiversity Conservation Act 2016* (BC Act) are overstated. For instance, it is portrayed that the provision of additional funding for Saving our Species is a benefit of the BC Act. This link is tenuous as the BC Act does not require funding provisions like this.

Of major concern to the RZS NSW is that the intent of the Regulations is focused on '**no net loss**' and supposed '**like-for-like**' and the overall supposed success of offsets. For example, impacts on one threatened species can be offset by retiring biodiversity credits that benefit a different threatened species (as suggested in Section 6 of the Biodiversity Conservation Act regulations (BCR)), but this is not like-for-like. Similarly, habitat offsetting for one set of threatened species (e.g. threatened plant



species such as *Grevillea juniperina* ssp. *juniperina* and *Pimelea spicata* in Cumberland Plain Woodland) are unlikely to result in adequate offsetting for other threatened species that live in the same habitat (e.g. Regent Honeyeaters, Speckled Warblers, Brown Treecreepers, Swift Parrots). This is because, although threatened species within a community may occur in the same habitat, they also have different **microhabitat** preferences, and this is not taken into account in the offsetting process. RZS NSW recommends that such a practice is removed from the Regulations. Moreover, it appears the BCR are prioritising threatened species and ecological communities. However, Section 6.1 of the BCR suggests that some significant impacts (e.g. loss of connectivity or loss of microhabitats) are not actually considered impacts for the purpose of calculating biodiversity credits and offsetting.

In Sections 6.3 and 6.4 of the BCR, **hollow-bearing trees** appear to be considered like-for-like without consideration of vegetation type and that artificial hollows can be used to offset loss of hollow-bearing trees. These are contrary to what is known about the value of hollows (vegetation type matters) and the effectiveness of artificial hollows (very limited). Lindenmeyer *et al.* (2017)¹ found that artificial hollows failed to protect populations of hollow-dependent native fauna which had been displaced by habitat clearance. Given the extensive time required for their formation (>100 years), tree hollows are one of the most limiting resources for fauna and therefore need a high level of protection.

Section 6.5 of the BCR suggests a reliance on the **threatened species profile database**. There are many problems with this database. For the great majority of threatened taxa there is a shortage of data on life history characteristics, and there are almost no data on the relative success of management actions that may ameliorate threats. Even where data exist in the scientific literature, the database frequently overestimates the ability to control threats and the extent of available knowledge. At the very least, such profiles need to be supported by citation of refereed literature to avoid over reliance on dubious sources and need substantial effort devoted to updating them.

Comprehensive monitoring for fauna and flora must be strongly included in the BCR to ensure that it is funded and implemented. For example, monitoring to effectively assess the appropriateness of the offsets approach and its actual outcomes (maintain, improve or degrade) has not been implemented under previous legislation. It needs to be acknowledged that rigorous monitoring is a complex task that will need to be adequately resourced. Monitoring of management actions is not sufficient alone - any monitoring or evaluation program must measure outcomes in terms of biodiversity responses (e.g. abundance, extent, distribution of species or communities).

RZS NSW has serious concerns about the **draft guidelines for considering serious and irreversible impacts**. It is unclear where and how information on impact thresholds will be derived for species and ecological communities. Impact thresholds are currently referred to as to be confirmed (TBC; Page 18). What objective method will be used to determine thresholds? Given that the register of candidate species is typically listed as Critically Endangered under the Act any impact threshold above zero seems inappropriate. It is therefore important that thresholds are only applied when there is a supporting peer-reviewed literature to justify a non-zero threshold. Current thresholds used within the existing threatened species database are not valid for use in this context.

A further concern in the code is the clearing opportunity for **paddock trees**. There is no requirement for a landscape assessment of hollow availability or for the role of hollow-bearing trees in the

¹ Lindenmeyer, D.B., Crane, M., Evans, M.C. and Blanchard, W. (2017). The anatomy of a failed offset. *Biological Conservation* 210: 286-292. DOI: 10.1016/j.biocon.2017.04.022.



movement of animals through the landscape. Paddock trees, which are typically old and contain hollows, may provide the last available hollows in a local landscape, but the current value (and its loss) won't be known. Only the extent of native vegetation on a property is assessed, but this could be regrowth with no hollows (no credits are required if there is greater than 70% vegetation cover on a property). It is essential that the condition of this cover is assessed, including the presence of hollow-bearing trees. The loss of these trees, a critically important remnant of the native vegetation community and essential for the persistence of species relying on their hollows, nectar sources and invertebrate foods, will further jeopardise the survival of listed species (e.g. the Regent Honeyeater). Notably there is no criterion for diameter at breast height (dbh) included in the Paddock Tree Area assessment in the Code, which we suggest should vary with tree species. There is also no end point to the allowable removal of one paddock tree per 50ha per 12 months. Therefore, over the long-term, this could result in the removal of all paddock trees from the local landscape.

Section 4.1.1.14 (page 10) states that **connectivity** of different areas of habitat relates only to 'flyways for migratory species' and specifies that high value land must be shown on site map. This is completely inadequate as connectivity is highly variable and is defined by the biology of individual organisms. It thus may not relate to mapped vegetation.

It is not clear how **accreditation to use the BAM** will work alongside ecological consultancy accreditation schemes that are already in place and run by the Ecological Consultants Association of NSW (ECA) and the Environmental Institute of Australia and New Zealand (EIANZ). The ECA Accreditation scheme, in particular, was set up with the assistance of funding from the OEH, but has been totally ignored by the BC and BCR Acts. Consultants are unlikely to seek accreditation under more than one scheme because of the costs and administrative paperwork involved.

It will likely be difficult for fauna consultants to be accredited to use the BAM because the methodology is based almost entirely on the structure and composition of vegetation communities (i.e. botanical information), with no or little monitoring or assessment of the value of habitats for fauna species or populations. Habitat information for threatened fauna species in the Threatened Species Database is not comprehensive enough for BAM assessors to predict the value of sites as threatened fauna habitat. Similarly, many botanical consultants who would be accredited to use the BAM will likely not have sufficient zoological expertise to determine the accuracy of the information in the Threatened Species Database in predicting the composition of fauna communities and, in particular, the presence of threatened fauna species on the sites that they are assessing. Most botanical consultants would also be unable to identify and assess the magnitude of key threatening processes that may be acting on threatened fauna that potentially occur on a site. Therefore, there needs to be equal time and resources devoted in the BAM for monitoring of fauna and flora, and the condition and distribution of both flora and fauna habitats, on assessment sites, rather than relying on fauna modelling by the Threatened Species Database. The accreditation scheme needs to recognise the value of accrediting both fauna ecologists and flora ecologists who can collect relevant field data, and analyse both field and desktop data with the credit calculator.

The RZS NSW believes that the Biodiversity Conservation Act, the Local Land Services Amendment Act and now the associated regulations are a major retrograde step for biodiversity conservation. We can see little improvement for biodiversity conservation over and above the current situation with the Acts and proposed legislation. As we said in our original submission, we are strongly of the opinion that the Biodiversity Conservation Act (and now the associated regulations) are a step backwards for biodiversity conservation and a step forward for those who view nature and its conservation as an impediment to development. We therefore urge that the draft regulations and



associated legislative and policy changes be reconsidered and refocused towards conserving the rapidly dwindling biodiversity of NSW.

Regards,

Dr Martin Predavec

President – Royal Zoological Society of New South Wales

[Current RZS NSW Council](#)

This submission has been prepared and approved by the current council of the RZS NSW. Current members of the RZS NSW Council include:

Dr Martin Predavec

Dr Pat Hutchings

Professor Peter Banks

Dr Adele Haythornthwaite

Dr Dan Lunney

Professor Chris Dickman

Dr Stephen Ambrose

Dr Peggy Eby

Dr Brad Law

Associate Professor Noel Tait

Dr Arthur White

JC Herremans

Dr Hayley Bates

Associate Professor Ricky Spencer

Dr Catherine Herbert