Romeo Lahey memorial lecture 2022

Quality counts – making protected areas effective, equitable and successful

Marc Hockings

Emeritus Professor | School of Earth and Environmental Sciences, The University of Queensland

It is a great honour to have been invited to give the Romeo Lahey memorial lecture for 2022. Romeo Lahey will forever be associated with national parks and nature conservation in Queensland. I never met Romeo but I did meet his daughter Ann Lahey on many occasions – Ann and my mother were both editors at the University of Queensland Press and became good friends. As a young university undergraduate, I would see Ann as I came and went to my mother's office – usually looking for a convenient spot to park a heavy bag of books for an hour or two while I went to the refectory instead of the library where I should have been headed.

In 1968 when Romeo passed away, I had just entered my final years of schooling and was developing an interest in zoology. A decade later, after completing my first research studies on small mammals in Cooloola National Park, I was planning to start a PhD on the evolution of life history strategies in plankton (now that thesis would have been a riveting read I am sure – at least for anyone who is into plankton). But fate intervened, and what was supposed to be a short interlude working as a ranger and interpreter at Girraween National Park, turned into 16 years working for Queensland National Parks and Wildlife Service. These were exciting times to be part of the Service with a committed and passionate group of young staff working to build and manage a nature conservation network in the State. By the time I left the Service and went back to university to do my PhD (as well as to teach), all thoughts of plankton and theoretical biology were gone and I was firmly focused on parks and park management.

But what to research? While working for QPWS I had been an interpreter, a marine park officer, and a manager of research and planning. I thought about what, in my experience, we did not do well and where some research might provide a better way forward. I settled on the issue of monitoring and evaluating the effectiveness of our management and conservation – how should we go about this, what should we monitor and what would successful conservation and management look like. It proved to be a good choice of a research area and one that has shaped my life since then. At the same time, I was invited to join the IUCN World Commission on Protected Areas. For those of you

unfamiliar with IUCN, it is the International Union for Conservation of Nature with a secretariat based in Switzerland. IUCN has, as part of its core, six expert Commissions that harness the volunteer efforts of conservation professionals around the world. Most people are familiar with the Red List of threatened species, prepared by the Species Survival Commission of IUCN. The World Commission on Protected Areas or WCPA consists of over 3000 protected and conserved area experts – a number of you in the room today are part of this Commission. This was an ideal group that I could collaborate with. It has allowed me to harness the collective knowledge and wisdom of my fellow WCPA members in thinking about how we should assess effectiveness and it has been a mechanism for spreading what we learnt to interested people and organisations around the world. And, along the way, it has taken me to some magic places on this world of ours. I'll put up some slides from these places throughout the talk (although in an era of "flygskam" or flight shaming perhaps I should have been more wary about this). The photos at least will provide my view of some of the great protected areas of the world.

This talk is not about management effectiveness but about the IUCN Green List of Protected and Conserved Areas. However, the Green List grew out of the work on management effectiveness so a little background is necessary. The 1980's and 1990's saw a major expansion of protected areas around the world and this was reflected in Australia and Queensland as well (and thanks to Peter Ogilvie for the Queensland data presented here). This massive expansion in protected areas was driven by concerns about species declines and biodiversity conservation. With this rapid expansion came an interest in better understanding management effectiveness. In 2003, at the World Parks Congress in Durban, we held a major workshop on this issue that generated lots of attention. The focus of this workshop was on methods for assessing and reporting on effectiveness. We also saw the results of early assessments and the realisation that there is a serious issue around lack of effectiveness. Some subsequent research by a group of us at the University of Queensland was able to quantify this, showing that globally only about a quarter of protected areas were achieving sound

levels of management and about 15% were complete paper parks with no effective management. A lot of the focus was on identifying what the main deficiencies were and how to respond to these.

This work has continued since then with "management effectiveness' now a major topic for managers. In Australia, States agencies in most jurisdictions have developed and continue to conduct regular assessments and to use the results to identify areas where management can be improved.

Five years after Durban, the Steering Committee of WCPA was meeting in Cape Town to review progress since the Parks Congress. We were addressed by Valli Moosa, then the Minister for Environment in South Africa and President of IUCN. He challenged us, and all of IUCN, on the negative messaging that was a major part of the conservation discourse. He asked "Why is IUCN so good at telling us what is going wrong? We always hear about failure, about what is not working, we don't hear about what **does** work. You have your Red List but where is your Green List?"

Hearing these words, I thought "He has a point!" and this started me thinking about how management effectiveness information could help here. It's not that we hadn't used management effectiveness assessments to identify strengths as well as weaknesses but the bad news overwhelmed the good. Recognising what is working also requires us to be clear about what constitutes success and how we can measure it. This was the birth of the Green List Standard. The idea a standard and a process for certifying achievement of the standard was not met with universal acclaim. A couple of memorable quotes from agency heads around the world when we started talking about this idea were "*We already know we are a world leading agency, we don't need IUCN to tell us*" and "*What if you say no to one of our sites?*" But we made a start and piloted a standard and a system of certification in the lead up to the World Parks Congress that was held in Sydney in 2014. What we learnt through this pilot study has led to the Green List Standard and the assessment process that we follow today. A key feature of the Green List Standard is that is intended to be used across all regions and countries of the world, on land and in the sea. In order to do this, the Standard

needs to be both universal but also adaptable to countries and jurisdictions without compromising quality. It is designed to be globally applicable and inclusive – not only for the most well-resourced areas or sites in the world. It is designed to be sufficiently rigorous to ensure sites demonstrate the achievement of conservation objectives and outcomes, as a result of good governance, sound design and effective management. These are the components of the Standard - Good Governance, Sound Design and Planning, and Effective Management, which work together to lead to Successful Conservation Outcomes. These four components contain a set of 17 criteria that are used to assess compliance with the standard.

A critical aspect of the Green List standard is the focus on demonstrating success for biodiversity, for nature and for people. While these components and criteria are designed to be universal and therefore applicable to all protected and conserved areas, their expression and assessment will be context-dependent. The Green List process provides for adaptation of the indicators and the recommended means of verification for each jurisdiction where the program is operating. Any adaptations have to be approved by the Green List Standards Committee to ensure that a common global standard of performance is maintained.

While the IUCN Green List Standard is designed and managed globally by IUCN, the main activities of the Green List process are implemented regionally or nationally for specific jurisdictions. At the heart of this are a series of expert groups who, together with the managers of sites nominating for the Green List, provide the working mechanisms for the listing process. The Expert Assessment Groups for the Green List (EAGLs) are composed of experts in protected area management who volunteer their time to support the programme at national or regional level. Members of the EAGL are selected by the relevant Regional Vice-Chair of the WCPA from applicants who respond to an open call for the position. The composition of the EAGL aims to provide gender and disciplinary balance and to ensure that all members are appropriately experienced. The first job of the EAGL is to adapt the global Green List indicators and means of verification to the context of the jurisdiction. The

system runs largely on volunteer effort and hence costs are low. I'd like to acknowledge and thank the members of the EAGL in Australia for all the work they have put into the process here. Sites seeking Green List certification do not have to pay any fee although they contribute to the meeting costs of the EAGL.

The Green List is an evidence-based standard and applicants for Green List status have to compile evidence against the criteria and indicators that is then reviewed by the EAGL members and through a process of site visits and stakeholder and community consultation. All of this is overseen by an independent reviewer who ensures that all procedures are followed in full. These checks and balances have made the process a bit more bureaucratic than I had originally envisioned but credibility is critically important in any system of certification.

Once the site has provided evidence of compliance against all criteria and indicators and the EAGL has conducted a site visit and public consultation, the EAGL members meet to consider the application. The EAGL can either recommend the site for addition to the Green List or indicate to the site managers where they think additional work is needed to meet the Standard. EAGL recommendations are then conveyed, together with a summary of site compliance and the report of the independent reviewer, to the international Green List Panel which takes the final decision on admitting the site to the Green List.

The Green List programme is now operating in 57 countries with 61 sites having been placed on the Green List and more than 80 other applicants representing about 200 individual protected areas preparing their applications at present. The programme is now scaling up, supported by a large US$6million grant from an American philanthropic organisation that will be announced shortly. In addition, organisations such as ESRI are supporting the Green List by providing free access to their GIS software for sites that join the programme. It is important that support flows to the sites and supports the managers of the areas striving to meet the global standard and does not get consumed by the administration of the programme itself. In places like the Amazon, the Green List is providing

the training and support for protected and conserved areas to lift the quality of management to achieve the Green List standard.

The mission of the Green List is to increase and recognize the number of Protected and Conserved Areas globally that are fairly governed, effectively managed, and achieving their conservation outcomes. We know how much pressure the natural environment faces around the world from the demands for access to resources, the impacts of climate change, invasive species and the other threats that have led to the current extinction crisis. Well managed and successful protected and conserved areas can be beacons of hope in the face of this often-overwhelming procession of bad news on the state of the world's environment. So how do we balance the outrage that many of us feel about the losses in the natural world with optimism that we can do something positive to stem this loss and restore a balance within nature. Optimism that is not just blind hope has to be based on understanding and on evidence that there are actions we can take to address and reverse the challenges that we face. Well managed protected and conserved areas can be part that evidence. As Chrisitiana Figueras, the former head of the Climate Change Convention, so eloquently expressed it, "optimism is the result of achievement, the result of success; you feel optimistic when you look back and say 'we did it' – but what's the value of that? Yes of course we should celebrate success, but optimism can also be used as a very, very powerful tool of change, a theory of change if you will, if you use optimism as the input into a challenge." This does not mean being ignorant of the difficulties and the problems but choosing to focus on the positive and acting to create the change that is needed.

We know that just counting hectares for conservation is not enough and that too many protected areas are not well managed and hence are not delivering the successful outcomes needed to secure nature's future. Yes, we do need more of the earth managed for nature conservation – that is a fundamental reasoning of the target of protecting 30% of terrestrial and marine areas by 2030 - but we also need to address the shortfall in quality of protected and conserved areas. The Green List is

first and foremost a Standard that represents what we mean by quality – it can be the theory of change that Christiana Figueres referred to. The criteria in the Green List standard embody a connected-up approach to management that links a clear understanding of the values that make a site important through the steps that are needed to secure those values through to demonstrated success in conserving those values.

To effect change across whole protected area systems without seeking Green List certification for every one of the worlds' 200 000+ protected and conserved areas, we need the Green List standard to represent a tipping point. We hear a lot about negative tipping points in nature, especially in relation to climate change. A paper[1] recently published in the journal *Science*, indicates that we are close to if not passed five climate tipping points including the melting of the Greenland ice cap. Extinction cascades as a result of the loss of one species leading to the loss of many is another example of a tipping point. But tipping points can be positive also – the uptake of roof-top solar in Australia may be such a case. If the Green List standard is to be a part of conservation optimism then we need to ensure that it is such a positive tipping point. We are not there yet, but the signs are positive. The sixty-one sites already on the Green List, cover 74.5 million hectares, or 1.47% of the total area of the globe dedicated to nature conservation as protected area. If we add the sites that have registered for the programme and are on their Green List journey the area rises to nearly 148 million hectares (larger than combined area of France, Germany, Spain, Portugal, Italy, Greece and the UK). This represents 4.37% of all protected areas, yet these sites are just 0.05% of protected areas by number. The Green List program has an objective of engaging all of the world's natural World Heritage sites in this journey of 'Getting to Green'. Can we make the Green List Standard and the listing of sites the tipping point for quality of conservation as well as quantity. In December this year the Convention on Biological Diversity will set a new Global Biodiversity Strategy and strategic

[1] Armstrong McKay, D. I., Staal, A., Abrams, J. F., Winkelmann, R., Sakschewski, B., Loriani, S., Fetzer, I., Cornell, S. E., Rockström, J. and Lenton, T. M. (2022). Exceeding 1.5^0C global warming could trigger multiple climate tipping points. *Science* **377**(6611): eabn7950.

plan with a likely target for protected and conserved areas under the headline 30 x 30 (30% of land and sea in protected and conserved areas by 2030) – a target based on quantity. I would like to see a 30 x 30 x 30 target with the additional 30 representing 30% of these sites (by area) applying the Green List standard in their management – a target for quality as well as quantity. If we could achieve this, then I think the Green List could indeed be the tipping point we need.

Moving to our own backyard, how could the Green List standard and certification process be used in Queensland and Australia to improve and assure the quality of management of our protected and conserved areas? There are currently four parks that have completed the Green List process and been placed on the Green List and a further three that are in the process of doing this. Three State agencies, New South Wales, Victoria and Queensland, have nominated sites for the list. Bush Heritage Australia has recently joined the Green List program and intends to nominate sites – with the first most likely being one of their reserves in Queensland.

Australia has over 12,500 protected areas. Preparing the evidence needed and going through the process of applying for the Green List is not a trivial exercise. Clearly, all, or even a significant proportion of these sites will not go through the process of applying to be placed on the Green List and we would not advocate for this either. So how do we make it the tipping point to quality that we need? If it remains all but "invisible", it will not have the influence that it requires. But if we can target some of the most significant protected areas in the country, visibility will dramatically increase. Size is not the only determinant of significance, but it is one important factor. In common with the world as a whole, we have a "measles" problem with our protected areas. About half of the 12,000 protected areas in Australia are less than 100ha in size – little green spots across the face of Australia. If we wanted to achieve a third of all sites on the Green List based on the number of sites, we would need to assess over 4000 sites. If we did it based on some measure of significance, this number will reduce dramatically. For example, if we use size as a measure of significance, the number of sites needed to achieve a third by area drops to less than 100. Obviously, a more nuanced

measure of significance beyond size is needed but making the Green List standard a standard for Australia and achieving that standard for our most important parks is not beyond us.

I was struck by the words of the manager of the most recent Green List site in Australia, Warby Ovens National Park in Victoria, when she recounted the journey they had taken with the Green List – how it had pushed them to more clearly define what success in their management would look like, what they needed to do to get there and the way it had motivated their team to make improvements in their management. She ended by saying "I am responsible for managing five protected areas in my region – we will only ever put forward one of these to go onto the Green List itself but we are applying the Green List standard and the changes we made to our management to achieve that standard in every one of the protected areas". In her words, it made her team optimistic that they could effect the change that was needed to achieve quality.

Outside of the process of assessing sites against the Green List standard, there is the possibility of using the Standard as an analytical tool to understand how protected and conserved areas are performing. Two recent developments in Australia illustrate this. A group of us recently complete some work for Parks Australia developing a framework and approach to assessing management effectiveness for their marine and terrestrial reserve system. The principles and approaches that underpin the Green List Standard are embedded in the approach that we have recommended to Parks Australia. In Tasmania, the Parks and Wildlife Service is using the Green List Standard to analyse the current level of performance in management of the Tasmanian Wilderness World Heritage Area and to prepare a resourcing bid for government in terms of what would be required to meet that Standard across the region. This is the first instance that I know of globally where the Standard is being used in this way. State and Commonwealth Treasury departments are understandably wary of government departments with their hands out asking for more. Will a reasoned and evidence-based argument against an internationally accepted standard be more effective – we will have to watch this space.

Finally, we the Green List Standard can be a guide for staff development and training – a way to reinforce the notion of quality in the minds of our rangers and the custodians of our natural heritage.