



THE FUTURE ROLE OF NATIONAL PARKS: INTRODUCING THE 'REVISITING LEOPOLD' REPORT AND RESPONSES

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ABSTRACT

Published in 1963 "Wildlife Management in the National Parks", more commonly referred to as the "*Leopold Report*" after its lead author A. Starker Leopold was the work of a small team of scientists brought together to evaluate and recommend changes to the management of wildlife in the national parks of the US. The Report created for the first time a unified vision for the US National Park System for management of wildlife and by extrapolation, all natural resources, a vision which has driven policy and practice in US national parks for over 50 years. In 2011, the National Park System Advisory Board Science Committee was asked to revisit the report. A new team of highly respected scientists prepared *Revisiting Leopold*, published here in full, which will guide US National Park natural and cultural resource management into a second century. The development and management of National Parks in the US has often been used as a template across the world and the US National Park Service hopes that the *Revisiting Leopold* may offer some guidance and inspiration for all protected areas. The *Revisiting Leopold* report is thus complemented here with four commentaries on its findings from leaders of protected area agencies around the world.

Key words: Leopold Report, US National Parks System, Revisiting Leopold, protected area policy and

A shelf in my office holds stacks of reports, prepared by notable authorities, decorated with stunning scenes of natural or cultural wonders, and replete with recommendations on the management of our national parks or other public lands. Most gather dust and only a few will ever be implemented or even referenced in the future. None of them will have the impact of an unadorned, twenty three page report from 1963 entitled "Wildlife Management in the National Parks", more commonly referred to as the "*Leopold Report*".

A. Starker Leopold was a PhD Biologist, son of renowned conservationist Aldo Leopold, and science advisor to President Kennedy's Secretary of Interior. In 1963 he was asked to bring a small team of scientists together to evaluate and recommend changes to the management of wildlife in the national parks. Eloquent, visionary and to the point, the *Leopold Report* created for the first time a unified vision for the US National Park System (NPS) for management of wildlife and by extrapolation, all natural resources. The *Leopold Report* called upon the NPS to create a 'vignette of primitive America'. This vision has driven policy and practice in the US national parks for over 50 years, resulting in the return of natural fire, the elimination of invasive exotics, and restoration of extirpated species such as wolves in Yellowstone National Park.

For my nearly 40 years working as a biologist, ranger, superintendent and now Director in the NPS, the *Leopold Report* has been my guide. But in recent years, I have seen challenges to that paradigm, much of it due to a rapidly changing climate. I witness glaciers melting, species driven by climate appearing for the first time in parks, fires burning for a longer season, and storms ravaging coastal parks. I realized that attempting to hold our national parks in some sort of ecological stasis based on an interpretation of a pre-contact America was no longer possible and not even viable. We needed a new paradigm for the management of our natural and cultural resources that was reflective of these emerging challenges but also respectful of our history and basic mission to leave these parks 'unimpaired for future generations.'

So, in 2011, I tasked the National Park System Advisory Board Science Committee to revisit the *Leopold Report*. Under the leadership of Committee Chair Dr. Rita Colwell and with the assistance of Science Advisor to the Director, Dr. Gary Machlis, a team of highly respected scientists traveled to national parks, conferred with colleagues and prepared another report which is published here in full. *Revisiting Leopold* is not as prescriptive as the original *Leopold Report*. No longer do we have an 'illusion of primitive America' to envision and

strive for, but instead a challenge to “steward for continuous change that is not yet fully understood”. The report acknowledges that climate change presents us with multiple futures and the necessity to adapt. Like the original, *Revisiting Leopold* will guide our natural and cultural resource management into our second century. Its recommendations, visionary in their own right, will help us develop new policies around assisted migration, ecological resiliency and the role of parks as climate refuges. At its core, *Revisiting Leopold* reminds us that we should always apply the precautionary principle to our decisions, leaving us (and future generations) the widest range of options for an uncertain future in order to ensure ecological integrity and cultural authenticity.

I have officially accepted the report and have an NPS team now preparing the implementation policies for the National Park Service, scheduled for completion in 2016, our Centennial. The IUCN, WCPA and the editors of

PARKS have graciously included the full text of *Revisiting Leopold* in this issue, and invited a number of leaders of protected area agencies around the world to comment on the report from the perspective of their own countries. I hope that *Revisiting Leopold* may offer some guidance and inspiration for protected areas around the world as facing an uncertain future.

ABOUT THE AUTHOR

Jonathan B. Jarvis is the 18th Director of the US National Park Service. His 37-year career has taken him from being a ranger to resource management specialist to park biologist to superintendent, regional director, and director. He is responsible for overseeing an agency with more than 22,000 employees, a US\$3 billion budget, and 401 national parks that attract more than 280 million visitors every year who generate US\$30 billion in economic benefit to the US.

RESUMEN

Publicado en 1963, “Wildlife Management in the National Parks” (La gestión de la vida silvestre en los parques nacionales), más comúnmente conocido como el “Informe Leopold” que lleva el nombre de su autor principal, A. Starker Leopold, fue el trabajo de un pequeño grupo de científicos reunidos para evaluar y recomendar cambios en la gestión de la vida silvestre en los parques nacionales de EE. UU. El informe creó por primera vez una visión unificada para el Sistema de Parques Nacionales de Estados Unidos para la gestión de la vida silvestre y, por extrapolación, de todos los recursos naturales, una visión que ha impulsado la política y la práctica en los parques nacionales de Estados Unidos por más de 50 años. En 2011, se pidió al Consejo asesor para Ciencia del Sistema de Parques Nacionales que revisara el informe. Un nuevo equipo de científicos altamente respetados preparó el informe *Revisiting Leopold* (Revisión del Informe Leopold), que aquí se publica en su totalidad, que servirá para orientar la gestión de los recursos naturales y culturales de los Parques Nacionales de los Estados Unidos en su segundo siglo. El desarrollo y la gestión de Parques Nacionales en los EE. UU. han sido utilizados con frecuencia a modo de plantilla en todo el mundo y el Servicio de Parques Nacionales de los Estados Unidos espera que *Revisiting Leopold* pueda ofrecer orientación e inspiración para todas las áreas protegidas. Por esta razón, el informe *Revisiting Leopold* se complementa aquí con cuatro comentarios sobre las conclusiones de los organismos responsables de las áreas protegidas del mundo.

RESUME

Publié en 1963 «Gestion de la faune et la flore dans les parcs nationaux» plus communément appelé «Rapport Leopold» d’après le nom de son auteur principal A. Starker Leopold, était le travail d’un petit équipe des scientifiques qui s’étaient ressemblés pour évaluer et recommander des changements dans la gestion de la faune et de la flore des parcs nationaux des États-Unis. Le Rapport a créé pour la première fois une vision unifiée pour le Réseau de parcs nationaux des États-Unis dans le cadre de la gestion de la faune et de la flore et, par extrapolation, de toutes les ressources naturelles, une vision qui régleme la politique et la pratique dans les parcs nationaux depuis plus de 50 ans. En 2011, on a demandé au Comité scientifique du Conseil consultatif du Réseau de parcs nationaux de réviser le rapport. Une nouvelle équipe de scientifiques hautement respectés ont préparé la Révision du Leopold, publié ici dans son intégralité, qui servira de guide pour la gestion des ressources naturelles et culturelles des parcs nationaux pour un nouveau siècle. Le développement et la gestion des parcs nationaux aux États-Unis ont été souvent utilisés comme un modèle dans le monde entier et le National Park Service espère que la Révision du Leopold pourra offrir des conseils et inspirer des idées à appliquer dans toutes les aires protégées. Le rapport Révision du Leopold est donc complété ici par des commentaires sur ses conclusions provenant de dirigeants des agences des aires protégées dans le monde entier.