

**Edited by Jennifer Sills** 

## **European Commission** may gut wolf protection

The recovery of the wolf in Europe is one of the rare conservation successes on the continent (1). Instrumental to this recovery has been the strict legal protection of wolves throughout most of their range under Annex IV of the Habitats Directive (2). Strict protection has prevented anticonservation interest groups from gaining the upper hand on wolf policy. The Court of Justice of the European Union has several times given a strict interpretation of the Habitats Directive in favor of wolf conservation (3). However, less than a year after it agreed to the ambitious Kunming-Montreal Global Biodiversity Framework, the European Commission has announced that it is considering a proposal to weaken the protection of wolves (4). This goes against a Directive "fitness check" study requested by the previous Commission, which concluded that changing annexes would be counterproductive and stressed the importance of enforcement (5).

The Commission has grown increasingly reluctant to fulfill its role of enforcing legal obligations for wolf conservation. It has failed to take action to prevent the repeated violations of EU law by Sweden for more than a decade (6) and has passively watched a wolf population disappear in Spain (7). It is now considering putting forward "a proposal to modify, where appropriate, the status of protection of the wolf," (4) presumably by moving the species from Annex IV to Annex V of the

Habitats Directive, as demanded by farmer, landowner, and hunter organizations (8).

In some areas, wolves are already classified in Annex V, under which wolf killing does not need to be justified. In practice, Annex V listing means that there is very little oversight from the EU. The protection of Annex V species has sometimes been treated as optional. Finland, for instance, has for years considered Annex V listing of its wolves in the northern part of the country as a license to nearly eradicate them (9).

Although wolves under Annex V still need to have Favourable Conservation Status (FCS), as under Annex IV, the contentiousness of what constitutes FCS would leave ample room for Member States to set it at the lowest possible population size for political reasons. This is already the case in Sweden, where the government instructed its Environmental Protection Agency to set FCS to between 170 and 270 wolves (10).

A change in wolf protection would in practice mean far fewer restrictions on the killing of wolves in Europe, which is why Sweden and Austria have recently asked the Commission to implement it (11). Under Article 19 of the Habitats Directive, however, a change in wolf protection requires the unanimity of all 27 Member States (12). Conservationists in Europe therefore need to find a single unsupportive government to veto undoing decades of wolf recovery.

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The wolf could soon lose some of the protection has allowed the population to grow.



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This work is the view of the authors and not necessarily that of the universities for which they work.

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#### COMPETING INTERESTS

G.C. is a member of the International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) Large Carnivore Initiative for Europe and a member of the French government-appointed Scientific Council for Wolf and Pastoralism, both unpaid advisory roles, M.O.O. was previously in the board of directors of the Association for the Conservation and Study of the Iberian Wolf, an unpaid advisory role. L.H. is a board member of the Sweden's Environmental Association of Law (Miljöjuristerna), an unpaid position. J.V.L.-B. is a member of the Canid Specialist Group of the IUCN SSC and a member of the Scientific Committee advising the Spanish Ministry for the Ecological Transition and the Demographic Challenge, both unpaid advisory roles.

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## **Australia's undeveloped** land is not "empty"

To address a housing crisis, Australia's federal government has set an ambitious target to build one million new houses within 5 years (1). However, clearing land for construction will destroy habitats, escalating local species extinctions. Almost 2000 threatened species live in Australia, two-thirds of which are affected by land clearing (2). Instead of viewing open spaces as opportunities for development, Australia should embrace high-density urban planning to protect its natural habitats.

Australian extinctions represent 5 to 10% of global extinctions since the year 1500 (3), and the extinction trajectory is projected to worsen (4). One of the most biodiverse continents on Earth, Australia continues to extinguish endemic species (5) in part because its relatively small population fails to recognize the inherent value of its vast natural landscapes. For most of the past few hundred years, much of Australia was considered to be *terra nullius*, or "empty land," belonging to no one.

When Europeans first colonized Australia, the legal myth of terra nullius dispossessed Indigenous Australians of any claim to land ownership. By deeming the land "empty," colonialists justified taking it for themselves. In 1992, Indigenous Australian Edward Mabo sued the State of Queensland, arguing that Indigenous people had preexisting rights to the land (6). The High Court of Australia ruled in favor of Mabo, rejecting the doctrine of terra nullius. However, the idea that undeveloped land is "empty" continues to permeate Australia's land-use decisions. To protect biodiversity and cultural values, Australia must overcome the idea of land as void of life.

Every tract of land earmarked for development has cultural connection, is already occupied by countless species, and provides ecosystem services (7). The government's housing plans will further threaten many endemic species, including the iconic koala, as well as reduce Australia's ability to reach internationally agreed-upon targets on biodiversity goals (8) and climate commitments (9). Although it may seem counterintuitive, Australia needs to adopt urban planning solutions similar to those in countries with high population density. These solutions include transparent and systematic planning that avoids high biodiversity areas (10), efficient housing that reflects shrinking households, densification without compromising green spaces, and adaptive and innovative design to accommodate different uses (11, 12). Providing safe and affordable housing for humans cannot occur at the cost of Australia's distinctive biodiversity and culture.

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# **Expanded US mentorship** requires accountability

Early-career researchers are vital to the scientific enterprise but face challenges such as career uncertainty, tenuous support networks, and financial instability that decrease their interest in pursuing science, technology, engineering, and math (STEM) fields (1). High-quality mentorship can be essential to improving persistence in STEM, as well as academic performance, connectedness, and sense of belonging (2-5). The US National Science Foundation (NSF) has required grant applications to include a description of mentoring activities—called mentorship plans—to benefit postdoctoral researchers since 2007 (6). In 2022, the requirement for mentorship plans was expanded to include mentorship for US graduate students under the CHIPS and Science Act (7). However, neither the CHIPS and Science Act nor NSF requires a formal assessment of its mentorship plans by mentees, mentors, or independent assessors.

Every mentorship plan should include some measure of accountability to ensure that the next generation of scientists and engineers receive the support they need as they start their careers. Indeed, good models already exist within the agency. For example, NSF's Research and Mentoring for Postbaccalaureates (RaMP) program in Biological Sciences suggests that research proposals include an independent assessor, such as a member of a university center for teaching, to evaluate mentors and mentees. These assessments must occur throughout the mentorship (i.e., formative assessments) to allow for adjustments, as well as at the end of the mentorship (i.e., summative assessments) (8). The model allows those trained in assessing mentorship and familiar with specific mentor–mentee situations to conduct assessments, rather than leaving them to an NSF program officer's discretion.

Accountability for mentorship plans can be initiated by academic institutions, but it is crucial for federal funders to provide support. Now that graduate student mentorship plans are required for NSF-funded scientists, NSF can set the standard for best practices in mentorship (9). Ensuring accountability for mentorship plans through independent university assessors will be one option. Funders should also consider adding mentorship assessments to the data already required in annual and final reports, which are produced to show how grant funding was used.

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