rows spanning 170 km in length (1, 2). Saudi Arabia is touting the city, with its high population density, use of renewable energies and artificial intelligence, and exclusion of automobiles, as an example of sustainability (1, 2). However, regardless of its carbon footprint, the plan will likely be detrimental to wildlife. Saudi Arabia should instead adopt an environmentally friendly design.

The habitat fragmentation and loss of population connectivity in the planned construction area pose substantial threats to global biodiversity (3). "The Line" is surrounded by areas of singular importance for the biodiversity of hyperarid ecosystems, including rare species sites (4) and Key Biodiversity Areas (5). Moreover, the city cuts through intact wilderness areas (4) and one of the country's proposed protected areas (6). It is also in close proximity to a potential wildlife corridor (4).

"The Line" could put migratory birds, which frequently fly through the region (7), at heightened risk as well. Skyscrapers surrounded by glass facades and gardens within a desert area could affect birds' behavior (8). Birds attracted by woodland areas or nighttime lights may suffer from collisions with glass surfaces, which already cause hundreds of millions of bird fatalities each year in the United States and Canada (9). If birds avoid light (10), the city could alter their migration routes by hundreds of kilometers.

Urban planners have argued that using a circular instead of linear design would enhance the city's habitability (2). Although any large city would present an obstacle to some wildlife movement and a potential distraction to migrating birds, a circular or square fractal shape would allow wildlife to circumvent the area more easily. Saudi Arabia should revise its plans to facilitate the creation of an ecological network that promotes connectivity (11, 12).

Promoting biodiversity requires a holistic approach derived from interdisciplinary collaboration between landscapers and biologists. Before construction begins, Saudi Arabia should conduct a biodiversity assessment. The plan should then be revised to remove barriers and add corridors for land animals; incorporate ponds, streams, and birder feeders to support migratory birds; and integrate native plants and preserve natural habitats within the city, including trees, shrubs, and ground cover. In addition, light pollution should be minimized to mitigate disruption to nocturnal species. By incorporating these features, Saudi Arabia can improve the city's sustainability, benefiting both human inhabitants and biodiversity.

Carlos A. Rivas^{1,2*} and Rafael M. Navarro-Cerrillo² ¹Facultad de Ciencias Básicas, Universidad Técnica de Manabí, Portoviejo, Manabí, Ecuador.

²Department of Forest Engineering, Laboratory of Dendrochronology, Silviculture, and Global Change, DendrodatLab, University of Cordoba, Campus de Rabanales, E-14071 Cordoba, Spain. *Corresponding author.

Email: carlosrivascobo@gmail.com

REFERENCES AND NOTES

- 1. The Line, (2023); https://www.neom.com/en-us/ regions/theline.
- R. Prieto-Curiel, D. Kondor, npj Urban Sustain. 3,1 (2023)
- N. M. Haddad et al., Sci. Adv. 1, e1500052 (2015).
- E. Dinerstein et al., Sci. Adv. 6, eabb2824 (2020).
- 5. BirdLife International, World Database of Key Biodiversity Areas (2023):
 - https://www.keybiodiversityareas.org/kba-data.
- 6. UN Environment Programme-World Conservation Monitoring Centre, "Protected Area Profile for Saudi Arabia from the World Database on Protected Areas" (2023); https://www.protectedplanet.net/country/
- 7. C. R. J. Boland, B. O. Burwell, Avian Conserv. Ecol. 15, 18 (2020).
- 8. B. M. Van Doren et al., Proc. Natl. Acad. Sci. U.S.A. 114, 11175 (2017)
- 9. K. M. Scott, A. Danko, P. Plant, R. Dakin, Ecol. Evol. 13, e9974 (2023)
- A. M. Korpach et al., Ecography 2022, e05581 (2022).
- 11. M. Kosma, A. Laita, R. Duflot, Landsc. Urban Plan. 239, 104847 (2023).
- 12. S. Wang et al., Ecol. Indic. 125, 107487 (2021).

10.1126/science.adk5292

Protect central Chile's biodiversity

The recently created Santiago Glaciers National Park covers 75,000 ha in the Andes Mountains in central Chile (1), about 60 km east of the capital city Santiago, which is home to 40% of the country's population. The park, located in the hotspot of biodiversity that covers all of central Chile (2), will protect several endangered species, including the Andean cat (Leopardus jacobita) (3), and 368 glaciers (1), which are crucial water reserves for the populations located downstream. However, to provide adequate protection to the region, Chile should expand the park from its current limit of 3600 m (1) down to an altitude of 1000 m.

Given that Chile has the world's 16th highest water shortage, a result of climate change and ever-growing demand (4, 5), protecting the central region should be a priority. However, the park covers only half of the 142,000 ha that citizen organizations requested (6). The 67,000 ha below its border support high biodiversity and are severely threatened by mining (7) and other human activities that can increase the risk of wildfires (8). Extending the park by 67,000 ha, to include all areas above 1000 m, would greatly expand its protection of biodiversity and associated ecosystem services. By facilitating ecotourism and restricting mining and construction, an expanded park would also increase access to nature for the large

urban population in nearby cities.

As a signatory to the Kunming-Montreal Global Biodiversity Framework (9), Chile has committed to protecting 30% of its terrestrial ecosystems. However, most of the 21.5% of the country's land that is already part of the National System of State-Protected Areas (SNASPE) is in Patagonia (10) in southern Chile. Despite the many threatened ecosystems in the central biodiversity hotspot (11), only a small fraction of the area is protected by the SNASPE (2, 6), including the new park.

The "30 by 30" goal must focus on effectively protecting Key Biodiversity Areas rather than simply reflecting the average area protected across a country (12). Opportunities for protecting biodiversity and maintaining key ecosystem services such as water provision, especially close to densely populated regions, must not be overlooked. Expanding the park's protections to lower altitudes would bring Chile closer to its goals, protect water resources, protect vulnerable species, and facilitate ecotourism.

Jorge F. Perez-Quezada^{1,2,3*} and Rosa Scherson⁴ ¹Departamento de Ciencias Ambientales y Recursos Naturales Renovables, Facultad de Ciencias Agronómicas, Universidad de Chile, Santiago, Chile. 2Institute of Ecology and Biodiversity, Santiago, Chile. 3Cape Horn International Center, Punta Arenas, Chile. ⁴Departamento de Silvicultura y Conservación de la Naturaleza, Facultad de Ciencias Forestales y de la Conservación de la Naturaleza, Universidad de Chile, Santiago, Chile.

*Corresponding author. Email: jorgepq@uchile.cl

REFERENCES AND NOTES

- 1. Ministerio de Bienes Nacionales, "Servicio de biodiversidad y áreas protegidas" (2023); https://mma.gob. cl/biodiversidad/servicio-de-biodiversidad-y-areasprotegidas/[in Spanish].
- 2. N. Myers et al., Nature 403, 853 (2000).
- M. B. Zapararte et al., Animals 12, 639 (2022).
- 4. World Resources Institute, "25 countries, housing onequarter of the population, face extremely high water stress' (2023); https://www.wri.org/insights/highest-waterstressed-countries?trk=public_post_comment-text.
- 5. R. D. Garreaud et al., Int. J. Climatol. 40, 421 (2020).
- #Queremos Parque, "Petitorio Queremos Parque" (2023); https://queremosparque.cl/petitorio/[in
- D. M. Carranza et al., Environ. Sci. Pol. 110, 46 (2020).
- 8. M. E. Castillo Soto et al., Ecol. Inform. 13, 116 (2013).
- Convention on Biological Diversity, "Kunming-Montreal Global Biodiversity Framework" (2023); https://www. cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf.
- Corporación Nacional Forestal, "Parques de Chile" (2023): https://www.conaf.cl/pargues-nacionales/ parques-de-chile/[in Spanish]. To find the percentage of Chile's land covered by SNASPE, download "Listado del Sistema Nacional de Áreas Silvestres Protegidas -Agosto 2023" under "Documents." In the spreadsheet, scroll to the bottom to find "% SNASPE en Chile."
- 11. A.J. Alaniz et al., Biol. Conserv. 204, 378 (2016).
- 12. International Union for Conservation of Nature, "A global standard for the identification of key biodiversity areas"

COMPETING INTERESTS

J.F.P.-Q. and R.S. signed the #QueremosParque petition as citizens but are not affiliated with the campaign.

10.1126/science.adk5110