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## Brazil's Pantanal threatened by livestock

Brazil's Pantanal region is a UN Educational, Scientific, and Cultural Organization World Heritage Site renowned for its spectacular wildlife (1). The vast wetland faces threats ranging from record-breaking fire outbreaks (2) to waterway plans that would dredge its main river and reduce water levels in the ecosystem (1). Cattle ranching is an ever-increasing threat to the Pantanal (3, 4), and a new bill has just been approved by the state of Mato Grosso that will open the protected portions of ranches within the Pantanal to use for livestock. If the policies in this bill are implemented, the changes will be devastating to the Pantanal's biodiversity and ecosystems.

On 29 June, the Mato Grosso Legislative Assembly approved Bill (PL) No. 561/2022 (5), which would allow cattle in the "permanent preservation areas" (APPs) and "legal reserves" (RLs) required by Brazil's forest code (Law 12.727/2012), as well as in all other areas in the Pantanal designated for permanent conservation. Previously, cattle were only allowed in seasonally flooded grasslands in this part of Mato Grosso (6). Opening protected land for cattle is incompatible with the goals of protected status. Cattle ranching is extremely harmful to protected lands, with the capacity to change species composition and richness (7).

Fallacious arguments have been used to expand livestock in the Pantanal, such as President Jair Bolsonaro's statements that cattle help to prevent fire. Such claims have no scientific basis, in contrast to the well-documented damage caused by cattle. The presence of cattle in protected areas kills trees, fragments habitats, and causes erosion that results in siltation of water bodies (7). Degradation of the vegetation in these areas makes them more susceptible to fires (8). These fires are expected to increase further with global warming and could take the Pantanal beyond its threshold for tolerating degradation, resulting in collapse of this important region's ecosystem services (2).

The Pantanal is also home to Indigenous peoples that would be affected by the newly approved law (6). These people have a right to free, prior and informed consultation about activities that may impact their territory and way of life, as established by International Labour Organization Convention 169. Although Brazil signed and ratified this convention, violations are frequent (9).

This law sacrifices Brazil's people and ecosystems in the name of profits. The country has idle areas with the capacity to expand its livestock production without using any additional protected areas with native vegetation (10). Moreover, the expansion of ranching allowed by this bill would increase exports rather than meat available for domestic consumption (11).

A complaint has been filed with the Federal Public Ministry recommending the immediate suspension of PL No. 561/2022 (12). Brazilian courts must base their decision on technical and scientific information and immediately suspend this new law. In addition, countries that import commodities from Brazil need to assess the impacts of this bill and review their imports of Brazilian beef.

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