South American Flamingos
Vulnerability to anthropogenic pressures

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Context
We propose a vulnerability assessment strategy for these species by identifying drivers of vulnerability and highlighting critical information gaps. We present a review on potential climate change impacts, eBird flamingo records, lithium mining projects, and migration strategies inferred through satellite tracking.

**Relevance**
- Evolutionary uniqueness
- Conservation status
- Flagship species
- Increasing anthropogenic pressures

**Review of pressures**
- Global change
- Identification of anthropogenic drivers

**Climate change**
Elevated potential evapotranspiration predicted in High Andes (mainly focused in Bolivia)
Local impact on populations (n=1)
High uncertainty

**Mining**
4 lithium projects
30 new projects to be developed within the next six years.
Low uncertainty on development trend
High uncertainty on impact (spp level)

**Agriculture**
Consistent and enduring pressure on lowland wetlands, emerging as the most persistent threat.

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**Review of species intrinsic traits**
- Seasonal distribution assessment (eBird records)
- Reproductive population review (global simultaneous census)
- Connectivity and seasonal movements (satellite tags)

**Reproductive census densities (%)**
Marconi et al. 2020

- Andean
- James
- Austral

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**Conclusions**
- Jujuy province in Argentina holds over 40% of Andean reproductive population and 20% of James. Mar Chiquita and associated wetlands presents high abundance of all three South American flamingos year round.
- Rapid long-distance movements in Argentina, Bolivia, and Chile, highlight the need for international conservation efforts for these species.
- Weighted indexes for exposure and sensibility drivers can aid conservation status assessments.