

Conserving Flamingos in the High Andes



The Argentine Puna

Location	Puna – Altiplano – Atacama of Argentina, Bolivia, Chile and Peru
Rio Tinto involvement	Rio Tinto HSE; Minera Escondida Limitada (MEL) of which Rio Tinto has a significant (30 percent) share
Partner organisations	<i>Grupo para la Conservacion de Flamencos Altoandinos</i> (GCFA – High Andes Flamingo Conservation Group); <i>Aves Argentinas</i>
Key people	Felicity Arengo (American Museum of Natural History); Patricia Marconi (Fundación YUCHÁN); Omar Rocha (BIOTA); Eduardo Rodriguez (CONAF); Marcelo Romano (Ecosur); Andes Bosso (<i>Aves Argentinas</i>)
Habitats	High Andean <i>salar/salinas</i> wetlands in high altitude desert, and key lowland wetlands.
Birds	Andean Flamingo, James's (Puna) Flamingo
Outcomes	Protection and monitoring of Andean and James's Flamingo breeding and wintering sites; community engagement and education; institutional networking; implementation of High Andean Wetlands Ramsar strategy

This project has seen the implementation of priority actions furthering the conservation of Andean Flamingo and James's (Puna) Flamingo in High Andean wetlands of the central dry Puna – Altiplano, as well as critical lowland habitats. It has also pursued a strategic approach for the design and implementation of a network of priority wetlands for flamingo conservation, identifying, profiling and safeguarding many new sites across the flamingos' core ranges.

Project background and history

Rio Tinto has a significant shared interest in the BHP-Billiton copper mining operation at Escondida in the Atacama Desert of northern Chile. This mine has associated Andean Flamingo interest located at the Salar de Punta Negra, where the groundwater is one Escondida's four sources of water for mine operations. Minera Escondida installed an artificial surface water recharge system that replenishes the lagoons to maintain flamingo values at this site. Rio Tinto and BirdLife International realised that the Globally Threatened Andean Flamingos that use the site needed to be better understood in order to target and focus management actions more effectively, not just at this site but regionally throughout flamingo range in the High Andean wetlands. A trans-national approach was clearly necessary.

With these goals in mind, the Rio Tinto-BirdLife International Programme became aware of the efforts and activities of the *Grupo para la Conservacion de Flamencos Altoandinos* (GCFA), the High Andes Flamingo Conservation Group. The 10-years-old GCFA was already well-established, having received significant support from the Ramsar programme in the Americas and from the Wildlife Conservation Society (WCS). It was realised that bringing further support to this group and establishing a partnership with *Aves Argentinas* (the BirdLife Partner in Argentina) could help develop a more strategic approach to targeted flamingo conservation in this remote region.

The GCFA brings together conservationists from the governmental, non-governmental and private sectors, primarily from the four flamingo range countries (Argentina, Bolivia, Chile and Peru), although people from other countries and international organisations have also been involved consistently. Since its inception, the GCFA has coordinated a regional research and conservation programme focused on flamingo population monitoring, protection of breeding colonies, and studies of distribution, habitat use, and health. These are in concert with training and outreach activities targeting park staff, students, professionals and the general public.

The GCFA currently includes members affiliated with a number of organisations within key countries, such as CONAF (National Forestry Corporation) in Chile, the National University of Salta, Fundación Yuchán and ECOSUR (Center for Research in Biodiversity and Environment) in Argentina, and BIOTA (Center for Studies in Theoretical and Applied

Biology) in Bolivia. The American Museum of Natural History and WCS in the USA have also played key supporting roles.

Project details

Since 2005, the project has seen two phases. The first was the implementation of priority actions for the conservation of flamingos in the High Andes. The goal of this project was to strengthen knowledge about Andean Flamingo ecology, population dynamics, breeding productivity, behaviour, wide ranging movements and habitat use. It also sought to make this information available to decision-makers and, more broadly, to the general public. In addition, it sought to strengthen project partner institutions, as well as to promote collaboration and integrated participation with local and national institutions, and international organisations and conventions.

Following the success of many of these activities, a second phase began and is still ongoing. This phase, entitled *The design and implementation of a network of wetlands of importance to flamingo conservation*, sees the implementation of a long term regional conservation strategy aimed at securing the integrity of both key High Andean and critical lowland wetlands crucial to the survival of Andean and Puna Flamingos. The goal is to establish a regional network of priority sites in the High Andes of Argentina, Bolivia, Chile and Peru, as well as lowland sites in Argentina. Such efforts have seen a better understanding of the importance of specific sites at Salar de Atacama and de Surire in Chile, Lagunas Colorada, Hedionda and Corante in Bolivia, and the Las Parinas, Brava and Vilama wetlands in Argentina. In addition, considerable effort has been focused on key lowland sites such as Rio Dulce-Mar Chiquitas and Melincue, which are important in winter. Outreach efforts at Melincue have recently resulted in the government of Argentina officially designating Laguna de Melincue as a Wetland of International Importance under the Ramsar Convention. Many of these above sites have been designated as IBAs or are under consideration as such.

The future

This second phase of the programme is ongoing and the data produced will give a broader and more detailed picture of which actions are needed to strategically address Andean and James's Flamingo conservation in the region, in the face of ongoing and expanding mining and other developments that are occurring.



Andean Flamingos