

## ENJOY THIS SPECIAL ISSUE!

Dear readers, colleagues, and friends:

In this special issue, you will find four articles and four short communications dedicated to Daniel González-Acuña, our first editor-in-chief, who passed away at the peak of his scientific and editorial career. I thank all those who were generous enough to send us their manuscripts and for their immense patience in waiting for this issue. Among the authors are several former undergraduate and graduate students, national and foreign colleagues, and friends of Daniel. Among the foreign authors are colleagues from Argentina, Brazil, Canada, China, and the United States, reflecting in part the connections Daniel made through his diverse research. The contributions by these authors constitute only a minimal recognition of Daniel's extensive professional and scientific legacy. Still, some manuscripts could not be included, and we will publish them in future issues. I invite you to enjoy reading these articles and to be fascinated by all the findings documented here.

### ARTICLES

#### **Beyond the fence: using wildlife rehabilitation centers as parasitological laboratories**

Terry D. Galloway highlights the advantages and disadvantages of using animals from Canadian wildlife rehabilitation centers to study ectoparasitic organisms. Terry reports that for 20 years, he had the opportunity to sample the ectoparasites of > 12 000 animals from various rehabilitation centers. Based on his long-term work and an envied sample size, Terry tells us about the ease and difficulties in obtaining ectoparasite samples from rehabilitation animals. Under advantageous conditions, researchers will have access to diverse hosts with good health and known geographic origin, will get adequate sample sizes, and will not have to sacrifice animals. Under less advantageous conditions, researchers will obtain limited sample sizes, will not know the origin of hosts, and will face biased infestations and cross-contamination. In addition, they could be at risk of emergent pathogens. However, wildlife rehabilitation centers offer parasitologists the opportunity to conduct studies that contribute to increasing our knowledge of ectoparasite ecology.

#### **Invisible diversity: the parasitic fauna hidden in forest owls**

Pablo Oyarzún-Ruiz and his co-authors report their findings about the metazoan parasite fauna in a sample of Rufous-legged Owls (*Strix rufipes*) from central-southern Chile. Although the number of owls analyzed was small, the sample showed a high taxonomic diversity of metazoan parasites. The authors found three species of ectoparasitic insects, including two species of chewing lice and one species of blood-sucking fly. Additionally, they recorded six species of endoparasitic worms, including two species of nematodes, one species of cestode, two species of trematodes, and one species of acanthocephalan. It is relevant that the authors found a low parasite load since a high infestation would imply health problems for Rufous-legged Owls. On the positive side, Rufous-legged Owls would constitute the home of several species of native parasites, contributing to maintaining the diversity of cryptic species in forest ecosystems. The findings of Pablo and co-authors could be just the tip of the thread in what we still need to know about the relationship between parasitic fauna and forest owls.

#### **Should we not fear? Absence of pathogenic rickettsiae in avian ticks from the Atlantic forest**

Julio César de Souza Jr. and his co-authors document the results of a study focused on detecting rickettsiae in avian ticks in an area of the Atlantic Forest in southern of Brazil. Rickettsiae are bacteria transmitted by lice, fleas, and ticks. Some species of rickettsia present in ticks cause spotted fever in humans. Since wild birds can act as primary hosts for ticks that carry pathogenic rickettsiae, the authors investigated the role of wild birds in carrying spotted fever. For this, the authors captured birds in several sites, collected their ticks, and analyzed samples of larvae, nymphs, and adults of the latter in search of rickettsiae. Among the 39 species of birds captured, ten hosted the tick *Amblyomma longirostre*, the only tick species found. The only rickettsia species present in ticks was *Rickettsia amblyommatis*. Since this rickettsia species does not transmit spotted fever, Julio and his team's results indicate that birds would not spread the disease in the area studied. This study is a pioneer in exploring the bird-tick-rickettsia relationship in the Neotropics. We are

waiting for more studies.

### **In Fiu's intimate and family life**

Perhaps several of our readers remember that the Many-colored Rush-tyrant (*Tachuris rubrigastra*) was the mascot of the Pan American and Parapan American Games held this year in Santiago of Chile. For the occasion, the Many-colored Rush-tyrant received the name Fiu, an onomatopoeia of its song. Despite its distorted color combination, Fiu became a striking symbol that attracted people's love. Conceivably, the strength of its colors was the reason. The multiple colors of Fiu represent the diversity of human beings. Until the Pan American Games, perhaps very few people knew the Many-colored Rush-tyrant. Popular curiosity led some of our ornithological colleagues to be invited by the media to tell what Fiu's life was like. That was tremendously positive for us as it connected wild birds with citizenship interests.

The Many-colored Rush-tyrant was one of the species of birds that most fascinated Daniel. Long before Fiu was famous, Daniel and his team that included me, studied the breeding biology of Many-colored Rush tyrants. For four years, we surveyed the intimate and family life of several pairs of this species in south-central Chile. We detected that nesting was markedly seasonal, with more activity in mid-spring. The females laid 1-4 eggs inside their conical nest made of reeds and incubated them for 14-19 days. Parents fed their chicks with aquatic insects (mostly dragonflies) until they left the nest 2-3 weeks after hatching. In general, pairs built their nests in sites with a higher density of reeds. About half of the monitored pairs produced a fledgling chick. That is, nesting success was  $\approx$  50%. Our findings not only reveal profound aspects of the natural history of the Many-colored Rush-tyrant, but we are sure that they will be fundamental in future conservation actions for this colorful and charismatic Tyranid.

## **SHORT COMMUNICATIONS**

### **Expanding the louse-diversity of Chilean ducks and geese**

Diego Alonso and his co-authors document their findings on the taxonomic diversity of chewing lice in several Chilean duck and goose species. Samples came from around twenty localities distributed between the northern and southern extremes of the country. The authors found eight species of lice in the sample of anatids analyzed. The Yellow-billed Pintail (*Anas georgica*) and Upland Goose (*Chloephaga picta*) contained the highest richness of lice. Diego and his co-authors found several associations between lice and anatids up to now not documented. In addition, they expanded the distribution range of

some louse species. Step by step, we are getting to know the louse fauna hosted on our native birds. The authors' work contributes to understanding the diversity of avian lice and increases our knowledge about the diversity of Chilean insects.

### **More habitat reserves, more bird habitats**

Gabriela Contreras and co-authors document the results of a study on bird diversity in the Nasampulli Reserve, a private protected area created to preserve the Araucaria (*Araucaria araucana*) forest. Its objectives were to determine the bird species richness within the reserve and detect species with conservation priority by Chilean Law. They detected 40 species of birds. Almost half of these were passerine species. Among the latter, there were four typical species of the undergrowth. In addition, the authors recorded four forest-dependent species with conservation priority. These were three raptor species and one species of woodpecker. The results of Contreras and co-authors are preliminary but could be relevant to establishing an eventual habitat corridor for native birds along the Andean forest belt.

### **Mmmm..., rabbits again!**

One of the many places that Daniel and his team visited was the Juan Fernández archipelago. During their stay there, they took the opportunity to collect about twenty pellets of Short-eared owls (*Asio flammeus*) to find out more about their diet. Analysis of the samples revealed that Short-eared owls preyed preeminently on European rabbits (*Oryctolagus cuniculus*) and secondarily on petrels (*Pterodroma* spp.). These findings coincided with those from a study carried out 14 years earlier, which reinforces the idea that Short-eared owls have a strong trophic link with rabbits in the archipelago. However, considering that petrels are numerous there, they could become a primary food for the Short-eared Owls in the event of a complete eradication of rabbits. Testing this hypothesis will be a tremendous challenge for anyone who wants to try it. For now, the beneficial thing is that the findings further increase the little we know about the trophic ecology of our island owls.

### **Danito's louse**

Daniel R. Gustafsson & Sarah E. Bush describe a new species of chewing louse whose host is the Turquoise-browed Motmot (*Eumomota superciliosa*). They dedicate their finding to Daniel González-Acuña, naming the new species *Motmotnirmus danielalfonsoi*. In this manner, authors acknowledge Daniel González-Acuña's 20-year dedication to the study of chewing lice. Daniel and Sara also clarify the taxonomic position of the chewing

louse *Motmotnirmus guatemalensis* by suggesting that its natural host is the Lesson's Motmot (*Momotus lessonii*).

After reviewing the first version of the manuscript, I suggested to the authors that they try to give a common name to *M. danielalfonsoi*. I intended to have an easy-to-remember name for readers unfamiliar with the taxonomic nomenclature used for lice. However, that was not so easy, and we discarded the idea. For now, here I affectionately name it "Danito's louse," as that is what some of his friends used to call Daniel. Daniel and Sara found that the "Danito's louse" has very different traits from those species of the same genus, coinciding with Daniel's way of being.

Let's fly with reading!

Ricardo A. Figueroa  
Editor-in-Chief

**Colleagues who collaborated as reviewers for this issue. The last names are in alphabetical order.**

Facundo Barbar (Argentina), José Iannacone (Perú), Fabián Jaksic (Chile), Carlos Landaeta-Aqueveque (Chile), Lucila Moreno Salas (Chile), Sebastián Muñoz Leal (Chile), Ricardo Palma (New Zealand), Jaime Rau (Chile), Marcelo Saavedra (Chile) and Ignacio Troncoso (Chile).

**English reviewer**

Roy May (U.S.A.).