The RedSiskin News

Autumn 2016

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People in the News

There is much to report since our last **Red Siskin Initiative (RSI)** newsletter. For starters, congratulations are in order! Jon Paul Rodríguez, Research scientist at Instituto Venezolano de Investigaciones Científicas and President of Provita, was elected Chair of the IUCN Species Survival Commission; Leroy Ignacio was elected president of the South Rupununi Conservation Society (SRCS) in Guyana; and Sydney Allicock, a sustainability champion for Guyana, was recently appointed Minister of Indigenous People Affairs. To all of them, as for the Red Siskin, we wish a fruitful future!

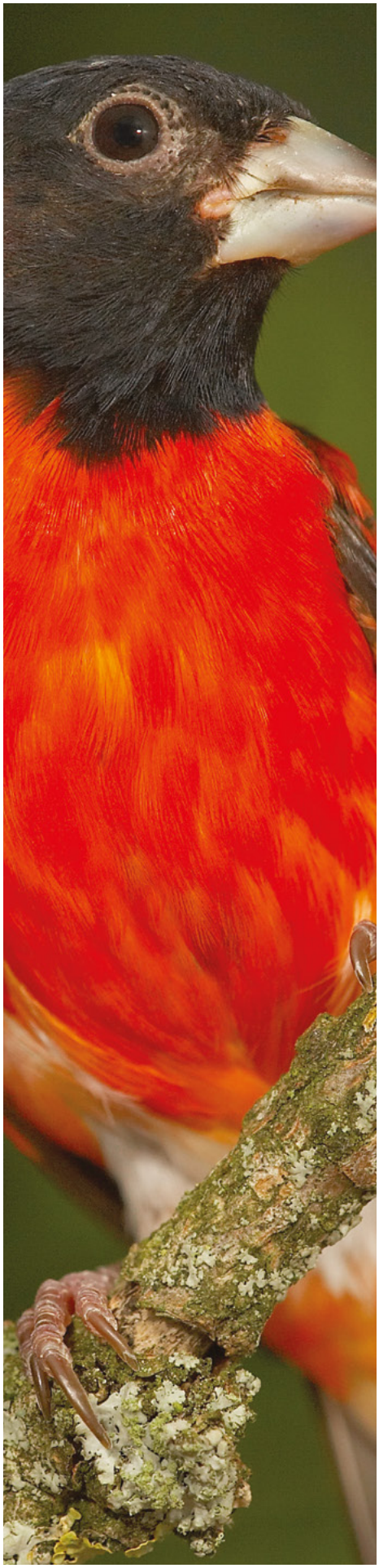
Jon Paul Rodriguez: Chair IUCN SSC

Maya de Freitas: New SRCS project officer

Leroy Ignacio: President SRCS

Smithsonian Visiting Researcher: **Miguel Arvelo**, RSI coordinator at Provita in Venezuela, is working at the Smithsonian (SI) Conservation Biology Institute (SCBI) in Virginia and the National Museum of Natural History (NMNH) in Washington DC from August through December. He has been very busy helping with research and planning, *ex situ* management, strengthening and expanding our global conservation network, outreach and communications, as well as fundraising.
Good luck Miguel!

RSI co-founder: **Kate Rodriguez-Clark**, formerly of IVIC in Caracas, has relocated to Boston to receive much-needed medical care. Her prognosis is excellent and she very much remains part of the team.



REDSISKIN INITIATIVE

Understanding the Red Siskin

Molecular Research:

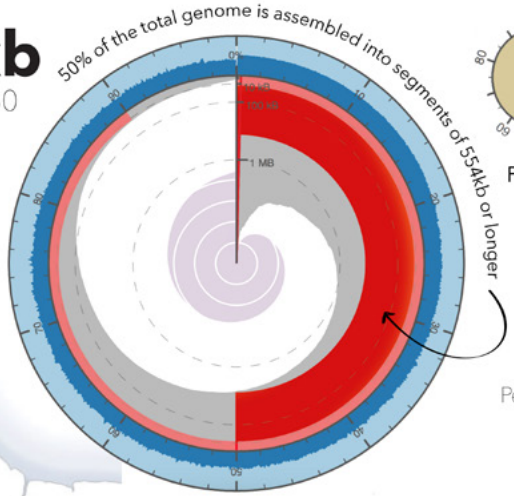
Conservation Genomics: SI researchers Paul Frandsen, Rebecca Dikow and HC Lim are leading research on siskin phylogeography and diversity as well as comparing siskin and canary genome sequence to develop an assay for ancestral hybridization.

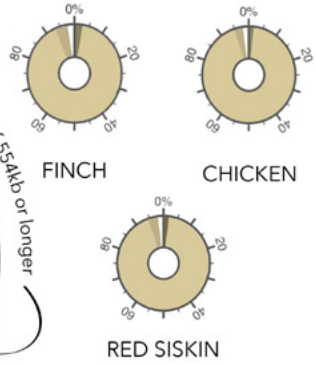
News and Progress for all Project Priorities!

deciphering the RED SISKIN GENOME

1.1 BILLION NUCLEOTIDES IN THE RED SISKIN GENOME

554kb
CONTIG N50
Measure of genome contiguity





Percentage of core genes is as good as the two **GOLD STANDARD** bird genomes

DISCOVER

differences across entire genomes between populations in Venezula and Guyana

IDENTIFY

genome regions associated with the ability to inhabit different environments

OTHER GOALS

- Assess the longterm viability of small, isolated populations
- Describe the phylogeographic history of the species
- Identify and exclude hybrids from captive breeding to preserve genetic identity
- Monitor and manage diversity of wild and captive populations

Understanding Red Siskin History: Jesus Maldonado, SCBI, and Brian Coyle, NMNH, are leading the analysis of DNA sequence recovered from 19th and 20th museum specimens to compare historic to modern population structure of Red Siskins.

Capacity Building: Miguel Arvelo, Provita, is receiving laboratory training at SI to recover and prepare DNA from museum samples in Venezuela for next generation sequencing.

Field Research:

Guyana: South Rupununi Conservation Society field research resumes. Rangers are banding birds, studying movement patterns, and collecting blood samples for genetic research with support from the Mohamed Bin Zayed Foundation.

Searching for siskins in Puerto Rico: In December, Jack Eitniear, Center for the Study for Tropical Birds, Mike Braun and Brian Coyle, SI-NMNH, along with Sergio Colon and several other members of the Sociedad Ornitológica Puertorriqueña (SOPI) will launch a months-long search for Red Siskins on the Caribbean island, where they were last officially documented in 1983.

Broadening the mission in Venezuela: The international network built and fostered by the RSI has been contributing to conservation efforts of other species and ecosystems. With support from the William Belton Fund, we are looking for "Lost Birds" in Venezuela in partnership with American Bird Conservancy. Stay tuned for upcoming news about this important work.

New Equipment: We are very grateful for the donation of a new camera, audio recording equipment and truck parts from Idea Wild. These will support years of future field research in Venezuela including proposed 2017 work on trapping activity, potential threats from other native species, and Bird Friendly coffee.

Preparing for Red Siskin Reintroduction

Smithsonian Red Siskin colony: The new SCBI flock is thriving and we expect to start hatching chicks this spring! We are lining up interns to assist researchers with data collection on nutrition, vocalization, and breeding behaviors.

Red Siskin Conservation Center: RUHL WALKER Architects have produced a spectacular conceptual design for the conservation breeding and education facility planned for Bararida Zoo-VE. This is a major step forward for the RSI reintroduction plan!

Conceptual design for Red Siskin Conservation Breeding and Education Center (RSCC) at Bararida Zoo in Barquisimeto Venezuela. This elegant yet economical facility will be the main site for breeding siskins for reintroduction and the central feature of Bararida's conservation education and training programs. Architectural services have been generously donated by Ruhl Walker Architects.

Call for Partner Zoos: The RSI is actively searching for new zoological institutions interested in participating in our *ex-situ* program. Any suggestions or personal contacts toward this end are welcome!

Connecting with people

Red Siskin Chocolate: Chocolate Mantuano, a Venezuelan chocolatier, Titina Penzini, a Venezuelan celebrity and Café Arabica, a Venezuelan coffee roaster have created a limited-edition chocolate bar with organic cacao and Smithsonian Bird Friendly Venezuelan Coffee to help RSI with outreach and fundraising. Chocolate Mantuano will ship orders of 200 or more bars of chocolate internationally for any supporter who wants to help.

VE chocolate is considered some of best in world.

Contact Miguel Arvelo marvelo@provitaonline.org or Brian Coyle coyleb@si.edu to place an order.

Red Siskin Initiative Celebration: SCBI hosted a celebration of the RSI on September 23. SCBI Director Steve Monfort and RSI-cofounder Michael Braun, NMNH, gave a wonderful introduction to the project followed by a tour of the Red Siskin colony and discussion with the RSI team about our work and vision.

SCBI celebration of RSI on September 23, attended by local supporters, some RSI team members and leaders from SCBI and NMNH

SCBI Autumn Conservation Festival 2016: The weekend long public outreach festival was a fantastic opportunity to share the RSI with hundreds of visitors. Our booth was rated one of the crowd favorites! Thanks to Christine Frandsen for graphic design and to Helen Moore, NZP, Kristin Black, SCBI, and volunteers for support.

Presentations:
North American Ornithological Conference: Brian Coyle gave a talk on the RSI at the 2016 NAOC in Washington DC.

SCBI: Miguel Arvelo presented on the RSI for the SCBI "Evening Lecture" series in October. The audience of nearly 100 included researchers, students and local community members.

Anne Arundel Birding Club: Brian Coyle gave a talk in October to the AABC.

Media:

Smithsonian National Zoo Red Siskin Website: The RSI now has an official web page on the National Zoo website.

***The Atlantic* magazine:** Read Ed Yong's great article about the history of the Red Siskin and RSI recovery efforts.

Finch Breeders Review: The Finch Society of Australia featured the RSI in a recent issue of their club journal.

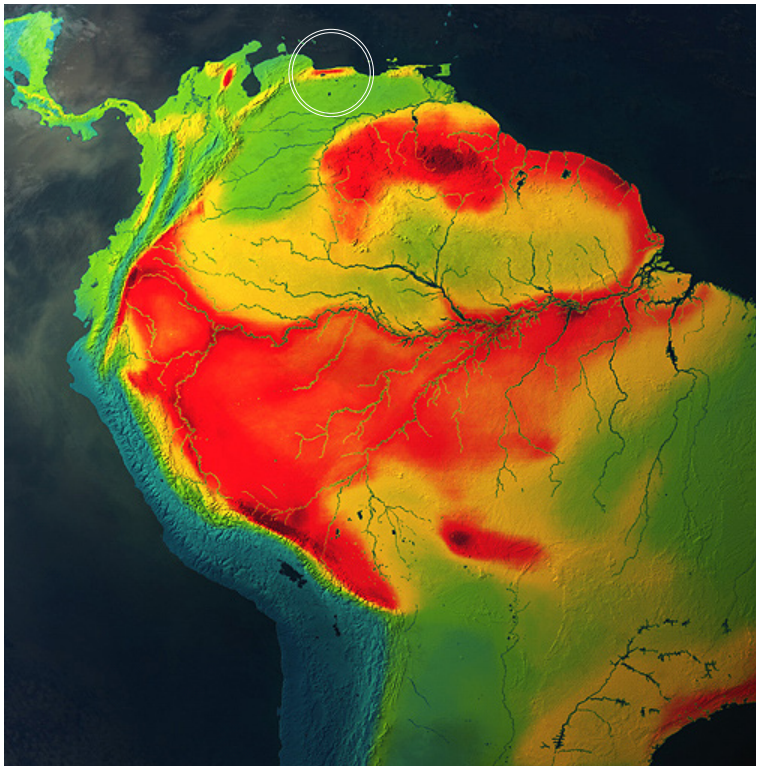
Aviary Life Magazine: Another important media partner in Australia, Aviary Life, has also been helping to support the RSI, including a recent update on project news.

More Safe Habitats

Guyana Bird Friendly agroforestry program: Tree nurseries have been established at Dadanawa, Katoonarib, and Shulinab villages, and more seedlings planted at Katoonarib, Shulinab, Rupunau. This reforestation effort integrates shade-grown coffee, cacao, and other cash crops and Non Timber Forest Products, following SI Bird-Friendly Coffee(c) guidelines.

Left **Peter Bichier**, Right **Luis Arrieta**

Red indicates highest bird-biodiversity. **Piedra e Cachimbo** is circled in



"Piedra e Cachimbo" coffee farms in Venezuela: In July, Peter Bichier, long-term field researcher with Smithsonian Migratory Bird Center and currently at Santa Cruz University, and Luis Arrieta, a Venezuelan agronomist, made preliminary surveys of shade coffee farms that are seeking to achieve Smithsonian Bird Friendly Coffee® certification. This effort will provide release sites for Red Siskins and conserve traditional agricultural communities, cultural heritage and critical overwintering habitat for migratory birds. Travel was made possible thanks to the American Bird Conservancy.

Halting Illegal Trafficking

Understanding the central threat: Thanks to support from the Neotropical Bird Club and a donation from Mr Jim Sillers, an RSI team led by Dr. Ada Sanchez-Mercado of IVIC is conducting research of illicit on-line trade and hubs and flows of domestic and regional trafficking networks. She is conducting field surveys to understand trafficking networks in VE, and connections with other countries

Grants submitted

Source	Amount USD	Title
·Skutch Foundation	9,915	Understanding seasonality of habitat use by the critically endangered Red Siskin in Venezuela.
·Darwin Initiative	159,720	Protecting species rich tropical cloud forests through sustainable agriculture in Venezuela.
·Ornithological Council	4,914	Science to the rescue: Understanding seasonality of habitat use by the critically endangered Red Siskin in Venezuela.
·The Explorers Club	2,496	Exploration and science to save the critically endangered Red Siskin in Venezuela.
·Smithsonian Women's Committee	30,000	Market Based Conservation: Applying the Smithsonian Bird Friendly Coffee certification program to protect forest habitat in Venezuela
·Smithsonian Scholarly Studies Program	75,000	Red Siskin Conservation: Investigating Potential Threats to a Highly Endangered Bird
USFW Neotropical Migratory Bird Conservation Act	32,000	Migratory Bird Conservation Through Coffee Farming in Venezuela

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Media partners

Titina Penzini

Collaborators

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