People in the News

Understanding the Red Siskin
Molecular Research:
- Conservation genomics:
- Understanding Red Siskin history
- Building research capacity in Venezuela
Field Research:
- Tracking seasonal movement in Guyana
- Searching for siskins in Puerto Rico
- Siskins and beyond in Venezuela
- New equipment

Raising more Red Siskins for reintroduction
- Smithsonian Red Siskin colony
- New design for the Red Siskin Conservation Breeding Center in Venezuela
- Call for partner Zoos

Connecting with people
- Red Siskin chocolate for sale
- Red Siskin Initiative celebration at Smithsonian Conservation Biology Institute
- Smithsonian Conservation Biology Institute Autumn Conservation Festival
Presentations:
- North American Ornithological Conference
- Anne Arundel Birding Club
- Smithsonian Conservation Biology Institute
Media:
- Smithsonian National Zoo Red Siskin website
- New content on the RSI website
- The Atlantic magazine
- Australian Finch Breeders Review
- Aviary Life Magazine

More safe habitats
- Bird Friendly shade coffee in Guyana and Venezuela

Halting illegal trafficking
- Investigating the structure, distribution and rates of trafficking in Venezuela

Grants submitted

Acknowledgements
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!
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.
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.
deciphering the RED SISKIN GENOME

1.1 BILLION NUCLEOTIDES IN THE RED SISKIN GENOME

554kb
CONTIG N50
Measure of genome contiguity

DISCOVER
differences across entire genomes between populations in Venezuela and Guyana

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

IDENTIFY
genome regions associated with the ability to inhabit different environments

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

Contact Miguel Arvelo marvelo@provitaoonline.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 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](http://example.com) on the National Zoo website.

**The Atlantic magazine:** Read Ed Yong’s [great article](http://example.com) about the history of the Red Siskin and RSI recovery efforts.

**Finch Breeders Review:** The [Finch Society of Australia](http://example.com) featured the RSI in a recent issue of their club journal.

**Aviary Life Magazine:** Another important media partner in Australia, [Aviary Life](http://example.com), has also been helping to support the RSI, including a recent update on project news.
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.

“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

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount USD</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skutch Foundation</td>
<td>9,915</td>
<td>Understanding seasonality of habitat use by the critically endangered Red Siskin in Venezuela.</td>
</tr>
<tr>
<td>Darwin Initiative</td>
<td>159,720</td>
<td>Protecting species rich tropical cloud forests through sustainable agriculture in Venezuela.</td>
</tr>
<tr>
<td>Ornithological Council</td>
<td>4,914</td>
<td>Science to the rescue: Understanding seasonality of habitat use by the critically endangered Red Siskin in Venezuela.</td>
</tr>
<tr>
<td>The Explorers Club</td>
<td>2,496</td>
<td>Exploration and science to save the critically endangered Red Siskin in Venezuela.</td>
</tr>
<tr>
<td>Smithsonian Women’s Committee</td>
<td>30,000</td>
<td>Market Based Conservation: Applying the Smithsonian Bird Friendly Coffee certification program to protect forest habitat in Venezuela</td>
</tr>
<tr>
<td>Smithsonian Scholarly Studies Program</td>
<td>75,000</td>
<td>Red Siskin Conservation: Investigating Potential Threats to a Highly Endangered Bird</td>
</tr>
<tr>
<td>USFW Neotropical Migratory Bird Conservation Act</td>
<td>32,000</td>
<td>Migratory Bird Conservation Through Coffee Farming in Venezuela</td>
</tr>
</tbody>
</table>
The Red Siskin Initiative / Iniciativa Cardenalito
www.redsiskin.org / www.cardenalito.org.ve
Autumn 2016

Acknowledgment

RSI Contacts
Brian Coyle, US - coyleb@si.edu
Miguel Arvelo, VE - marvelo@provitaonline.org

Edition
Brian Coyle
Miguel Arvelo
Bibiana Sucre VE - bsucre@provitaonline.org

Design
Manuel Lara VE - manuartdesign@gmail.com

Project partners
- Smithsonian Institution
- PROVITA
- IVIC
- Parque Zoológico y Botánico Barú
- South Rupununi Conservation Society

Project supporters
- Merlin
- National Finch and Songbird Society
- RWA

Media partners
- Titina Penzini

Collaborators
- APEC
- AUSIO
- TUCAN
- CICLÓN
- Mantuano Chocolate
- MÁRQUEZ

Sponsors
Gold
- CONSERVATION LEADERSHIP PROGRAMME

Silver
- BAND Foundation

Bronze
- IDEA
- RSPB
- SCION
- Wild
- Sheller
- Mr. James Sillers