

# Securing the Future

For species and software

**SCTI is a bold international partnership bridging the gap between conservation science and technology.** Formalized in 2014, SCTI fills an essential role in the conservation community: to ensure that new innovations and tools needed for species risk assessment, conservation planning, and population management are developed, globally available, and used effectively.

## Our Approach

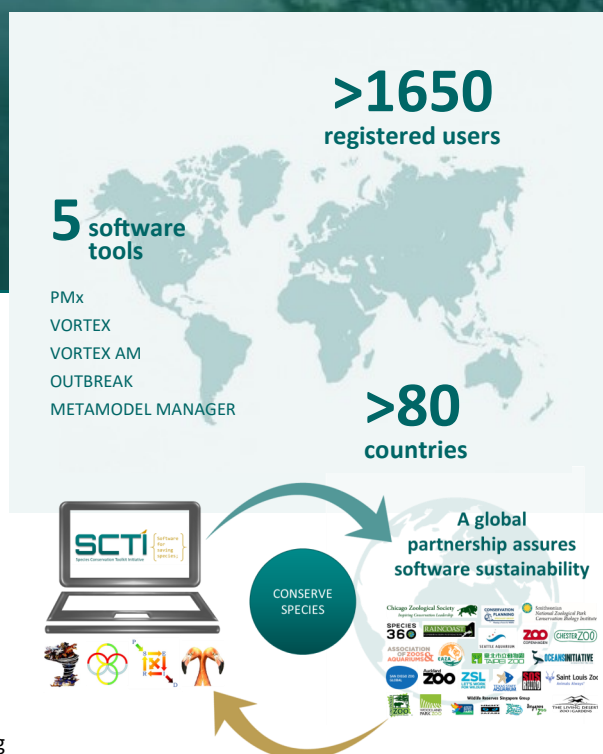
Diverse  
Expertise  
in population biology,  
computer programming,  
& conservation planning

Active  
Collaboration  
with our partners & the  
wider conservation com-  
munity

Organizational  
Agility  
to respond to emergent  
needs with speed &  
innovation

## 2019 in Review

Here are some examples of the progress we made through 2019 in the following strategic areas:



Science & Tool Enhancement   Capacity Building   Applications with Impact   Strategic Planning

## Conservation Highlights

## Predicting the impact of Ebola on Mountain Gorillas

With the Smithsonian Conservation Biology Institute and Gorilla Doctors, we are using *OUTBREAK* to investigate the impact on mountain gorillas if Ebola spreads from nearby human villages into the Virunga National Park. The model incorporates field data on gorilla family group size and location to project how an outbreak may unfold through space and time and to provide guidance on intervention strategies.



## Integrating wildlife population and landscape models

In collaboration with The Nature Conservancy, US Fish & Wildlife Service, and US NASA, SCTI staff are working to integrate population models using *VORTEX* with models of vegetation change (using the program ST-Sim) in order to predict the impacts of alternative land management practices on the Florida scrub jay, an endangered species that is endemic to Florida. TNC will be paying SCTI for enhancements to the *VORTEX* and *METAMODEL MANAGER* software to enable comprehensive habitat and population models.



## PMx Developments

- Recent updates include a completely redesigned Selection Tab, extra life table details, & processing of new data fields in ZIMS for Studbooks import files.
- Continued work on a Reproductive Tab, Genome Resource Bank module, & *VORTEX* export.
- New funding to support a half-time SCTI position for two years to help develop a new software package that will adapt and extend *PMx* methods for plant and invertebrate species.
- New training resources, including a comprehensive guide for using the Selection Tab and example data & project files included with *PMx* installation.
- The team is also beta testing an educational “lite” version of *PMx*, which can be further customized.

## Capacity Building for Population Modeling

In December, SCTI & CPSG worked together with 20 specialists from 12 Brazilian institutions to build population viability modeling expertise in Brazil. During the workshop, which was organized by CPSG Brazil & the government agency CEMAVE, the group developed *VORTEX* models for seven Brazilian bird species. Goals for modeling ranged from national Red Listing assessment to planning a reintroduction strategy.



## SCTI Strategic Planning

### Planning for the future of SCTI & species conservation tools

In December, SCTI convened with representatives of our Advisory Group and several sponsoring organizations in order to get clarity and consensus around the overall goals, scope, and governance structure of SCTI. Prior to the meeting, we solicited input from an array of SCTI partners and toolkit users to determine how they currently view SCTI, what they want SCTI to provide in the future, and how best we can together achieve our goals. A draft strategy report will be circulated to our advisors & partners in 2020. This will include further explanation of agreed upon values and identified strategic priority areas.

### 2019 Meetings

SCTI maintains an active presence in the conservation community. Here are some of the meetings that one or more of the SCTI team attended in 2019.

- ZIMS for Studbooks Training Workshop, Singapore
- CPSG Strategic Planning, San Diego, USA
- Ebola Modeling Workshop, Washington, D.C., USA
- Molecular Data Scientific Advisory Group Workshop, San Diego, USA
- California Condor Recovery Field Team Meeting, San Diego, USA
- AZA Annual Conference, New Orleans, USA
- EAZA Annual Conference, Valencia, Spain
- CPSG Annual Meeting, Buenos Aires, Argentina
- PVA Development Workshop for Select Brazilian Bird Species, São Paulo, Brazil
- PMxceptional IMLS Kick-off Meeting, Chicago, IL

### SCTI Values

Science-based  
Impactful  
Innovative  
Collaborative  
Accessible

### Strategic Priorities

Staffing & Succession Planning  
Governance & Priority Setting  
Communication & Transparency  
Implementing SCTI Values



## Thank You to Our Partners!

Financial commitments from our partners ensure sustained and accelerated innovation in species conservation methodologies and freely available tools to all. Many partner organizations have chosen to make annual or multi-year financial commitments, providing stability into the immediate future. We will continue to renew and seek new partners.

SCTI also benefits from an Advisory Group comprised of partner representatives and additional experts in the application of our tools. We thank these individuals for providing strategic organizational and technical advice.



And welcome to our newest partners!



We recognize that many of our partners are struggling to deal with the organizational and financial challenges of the COVID-19 pandemic. We manage SCTI resources cautiously, and we are confident that together we will get through this difficult year. We are very grateful for the ongoing support of our partners.

## Finances

FY2019 was strong for SCTI thanks to our dedicated partners, including three new commitments made in 2019. Our support has been enough to cover expenses, and we hope to invest in additional staff and infrastructure in the coming years. All of the contributed support from our organizational partners is unrestricted and used almost entirely for Program expenses. This is possible due to the generous in-kind support from our managing partners that covers administrative and fundraising expenses.



### Want to ...

Donate?  
Be our partner?  
Collaborate?  
Join the team?

#### What skills are we looking for?

- Creative thinkers with a quantitative biology background & an aptitude for independent learning to develop programming skills.
- Experience with programming compiled code is ideal, but capability with shell scripting, command line, R, or SAS are also helpful.
- Website or LMS design & management.

### Contact Us

Contact us at [help@SCTI.tools](mailto:help@SCTI.tools) or visit our website at <https://SCTI.tools> to learn more about SCTI tools and activities.



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