FEDERAL INTERAGENCY COMMITTEE ON INVASIVE TERRESTRIAL ANIMALS AND PATHOGENS



SYSTEMATICS SUBCOMMITTEE

FY2020 and FY2021 STRATEGIC AND WORK PLAN

> LAST UPDATED: NOVEMBER 25, 2019

Catalyze efforts to improve and expand systematic resources and capabilities nationally.

MISSION

To strengthen national and global systematics to enable prediction, effective prevention, and management of invasive species to ensure biosecurity, public health, economic security, and environmental and agricultural security and sustainability.

WHEN ACHIEVED, WE WILL HAVE ...

- 1. Adequate human and physical resources for Federal systematics collections.
- 2. Systematics expertise in all groups of organisms.
- 3. An integrated, web-based information system that links organismal biology, geography, and taxonomy with interactive keys and collections data.
- 4. An effective communication network linking Federal, academic, national and international taxonomic resources.
- 5. A reinvigorated capacity and commitment by universities to prepare professionals in systematics.
- 6. A culture that values and sustains its systematics resources.

TO ACCOMPLISH THIS VISION, THE SYSTEMATICS SUBCOMMITTEE...

- Has prepared a Situation Report "Protecting America's Economy, Environment, Health, and Security from Invasive Species Requires a Strong Federal Program in Biological Systematics" (2008) to create awareness of the crisis in systematics in Federal agencies.
- 2. Will comprehensively survey Federal systematics capacity and needs.
- 3. Will prepare a **10-year Plan**, delineating actions and budget estimates for consideration by Agency and Congressional decision makers. This Plan will catalyze the strengthening of systematics resources for Federal agencies to predict, prevent and manage invasive species.
- 4. Will promote ways to leverage the Federal effort through external partnerships, to **reinvigorate universities' training capacity** and to **augment international efforts**.

STRATEGIC GOALS

Phased in over 10 years, an enhanced Federal Systematics Program will better counter national security threats posed by invasive species—whether introduced intentionally or not, will fortify a new generation of systematic biologists, and establish contingencies for continuing operations in case of a shutdown of the Federal government.

- **1.0** Publish and disseminate paper "Strengthening the Federal Capacity in Systematics and Creating a Safety Net for Biosecurity" (2008). (Completed) Consider one pager to highlight fundamental issues/importance of systematics.
- 2.0 Administer a Federal Systematics Survey for at least 40 collections to assess federal systematics capacity and needs. (Ongoing)
 - 2.1 Incorporate statistical analysis, survey expertise and web-based survey design for the data call.
 - 2.2 Identify agencies, conduct the Federal Systematics Survey, and analyze responses for two to three collections annually.
- 3.0 Publish and disseminate a paper entitled "Enhanced Federal Systematics Programs" that incorporates the survey's results and delineates a 10-year plan of actions and federal funding needs.

FY2020-2021 WORK PLAN

| | Actions | FY20 | FY20 | FY20 | FY20 | FY21 | FY21 | FY21 | FY21 |
|----|--|------|------|------|------|------|------|------|------|
| | Actions | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| 1. | Engage in quarterly conference calls (approximately one hour in length) to review the status of collections through FY20 and FY21. (Hilda, Ben, Lisa) Conference call of SSC. Individual conference calls with the groups that are working on the ongoing systematics surveys in FY20 and FY21. 2020: March, June, September 2021: January, March, June, September, December | • | • | • | • | • | • | • | • |
| 2. | Prepare briefings for decision makers and partners (e.g. universities and other agencies) for each completed survey and Action Plan. (Hilda and Team Leads) Advise on briefings, format, and content to decision makers and partners (e.g. universities and other agencies) for each completed survey. As needed, requests form interested parties. | • | • | • | • | • | • | • | • |
| 3. | Engage in quarterly conference calls (approximately one hour in length) to review the progress of the SSC. (Hilda) 2020: March 26, June 25, September 24. 2021: March, June, September. | | • | • | • | | • | • | • |
| 4. | Develop an action plan for each completed survey. (Hilda) Develop Mycology Collection Action Plan Develop Nematodes Collection Action Plan Develop Entomology Collection Action Plan March, May, and October 2020 | | • | • | | • | | | |
| 5. | Complete collections in 2020 and 2021. (Hilda, Lisa, Ben) • December 2020 and 2021 | | • | | | | • | | |
| 6. | Prepare an Annual Systematics Subcommittee Report and updates on Work Plan progress as needed to ITAP for 2020 and 2021. (Joyce, Ben, Hilda) Review and finalize Annual Subcommittee Reports and post to the ITAP website. Create the Annual ITAP Committee Report consolidating and finalizing all Subcommittee Reports and post to the ITAP website. (Hilda, Joyce Bolton) January 2020, January 2021 | | • | | | | • | | |

| Actions | FY20 Q1 | FY20 Q2 | FY20 Q3 | FY20 Q4 | FY21 Q1 | FY21 Q2 | FY21 Q3 | FY21 Q4 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|
| 7. Notify and communicate about each completed systematic survey. (Hilda with Ben or Lisa) ARS USDA APHIS Notify appropriate scientific organizations and other stakeholders Put action plan/overview on ITAP website Dates To be determined (avail of leadership). At Agency level, once briefing is received goes up on website. | | | • | • | 4 | • | | |
| 8. Complete three ongoing collections in 2020: Nematodes, Entomology and Mycology. (Hilda, Ben, Lisa) Mycology and Nematodes collections assessments (ASM) were finalized 10/2019. Finalize Entomology collection assessment (ASM). Entomology ASM 6/2020 – Ben Entomology AP 06/2020 – Ben | | | • | | | | • | |
| 9. Train three additional volunteers on the Subcommittee team to complete survey administration and establish collection survey schedules. (Ben, Lisa, Hilda) Lisa to contact Margaret Pooler Smithsonian collection (Ben Rosenthal) | | | | • | | | | • |
| 10. Provide surveys in a user friendly, automated format with the support of IT. (Ben) Lisa send the word document dated 6/29/2017 Lisa send the spreadsheet July 2020 – Finalize electronic document (Bando) | | | | • | | | | |
| 11. Identify next set of two-three collections to survey. Find contacts in each systematic collection. Train contacts. (Hilda, Lisa, Ben) Tied to #9, ID Collection Person - July 2020 | | | | • | | | | |
| 12. Hold a biannual meeting with full ITAP to share the results and learnings from the completed collections. (All SSC Members) Winter 2021 | | | | | | | • | |
| 13. Develop an action plan for each completed survey in 2021. (Hilda and Survey Leads) Deadline TBD | | | | | | | | |