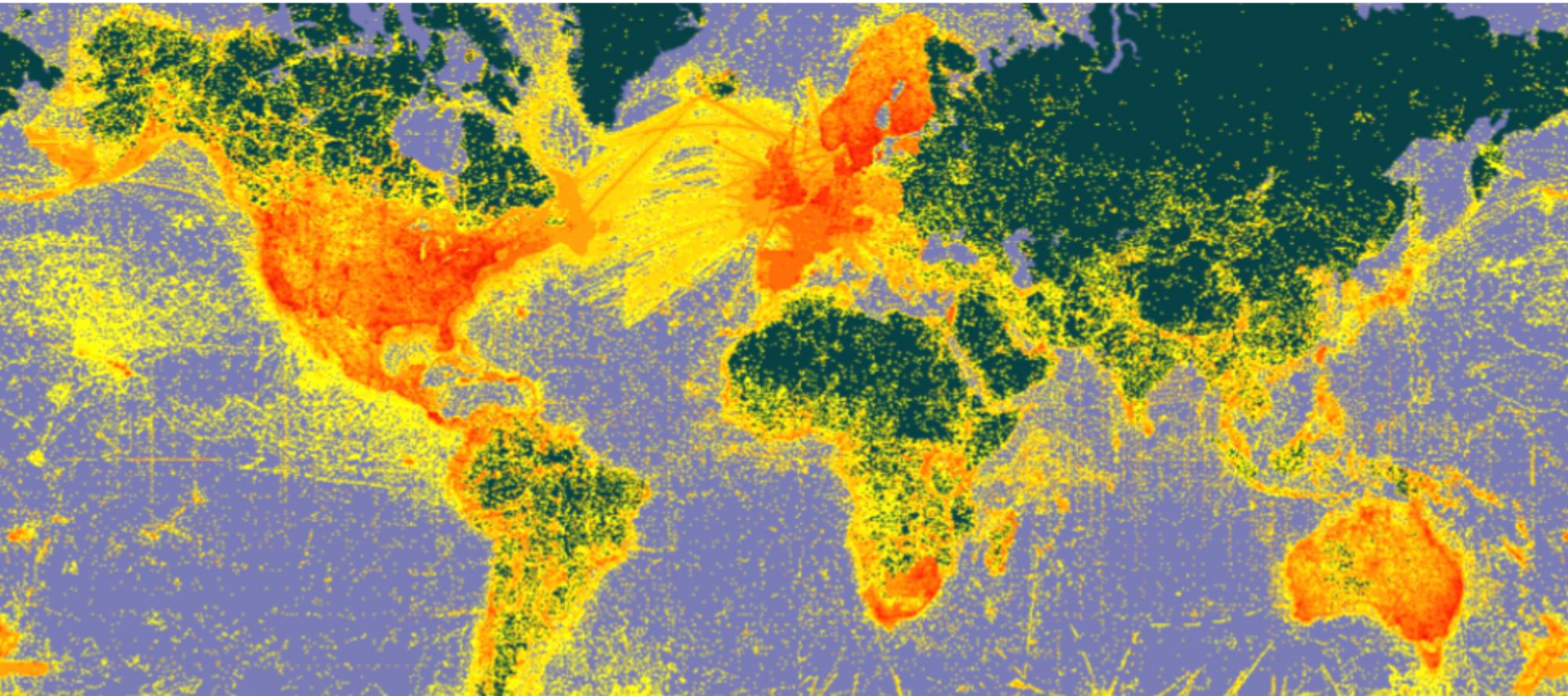




GBIF

Global Biodiversity
Information Facility



Accelerating the Discovery of Biocollections Data

Siro Masinde, Programme Officer for Content Mobilization

IDIGIO SUMMIT V, WASHINGTON DC, 4-6 NOVEMBER 2015

TASK FORCE OBJECTIVES, 2015 - 2016

1. Document best practices in data mobilization
2. Document successful business models for resource mobilization
3. Consult with other capacity building and content mobilization initiatives. e.g., iDigBio, ALA
4. Guidance in training and outreach materials



GBIF'S TASK FORCE MEMBERS

1. Leonard Krishtalka, USA, Chair
2. **Barbara Thiers, USA**
3. **Deborah Paul, USA**
4. **Eduardo Dalcin, Brazil**
5. **Masanori Nakae, Japan**
6. **Ian Owens, UK**
7. Jean Ganglo, Benin
8. Marc Pignal, France



**Siro Masinde, GBIFS task
force Coordinator**

ACCELERATING DISCOVERY OF BIOCOLLECTIONS DATA

Metadata approach

- c. 90% of worlds c. 3 billion specimens of NHCs are not digitized
- Metadata is critical to advancing digitization efforts, priorities and opportunities, and enables the community of users to search and find relevant collections
- Opportunity to participate whether institution is digitizing or not



GBIF Global Biodiversity Information Facility

Search occurrences

6,255,969 Occurrences

6,255,969 results

DATASET	LOCATION	BASES OF RECORDS	DATE
MNHNT occurrence DwcA, R			
Pos sinatica Steud. Published in MNHT occurrence DwcA	Turkey 81,8642 21 Elevation: 2,238m	Specimen	8/2014
Cordia Linnaeus, 1753 Published in MNHT occurrence DwcA	Mexico 820 Elevation: 800m	Specimen	8/2014
Vitis rotundifolia var. munsoniana (Blum...) Published in MNHT occurrence DwcA	United States 23,854 81 27 Elevation: 150m	Specimen	8/2014
Boerhavia erecta L. Published in MNHT occurrence DwcA	Mexico 820 Elevation: 800m	Specimen	8/2014
Vitis cinerea var. floridana Munson Published in MNHT occurrence DwcA	United States 23,854 81 27 Elevation: 150m	Specimen	8/2014
Vitis cinerea (Engelm.) Engelm. ex Miels... Published in MNHT occurrence DwcA	United States 23,854 81 27 Elevation: 150m	Specimen	8/2014
Vitis cinerea (Engelm.) Engelm. ex Miels... Published in MNHT occurrence DwcA	United States	Specimen	8/2014

SURVEY ON NATURAL HISTORY COLLECTIONS

Purpose is to determine:

- Digital readiness of the world's biocollections and their institutions
- Benefits to a collection / institution that digitization engenders
- Impediments to collection data digitization
- Make appropriate recommendations



https://ufl.qualtrics.com/SE/?SID=SV_byg2mgbtYdeF3bT

***Please participate in survey,
it takes 10 - 30 minutes***

INSTITUTION, COLLECTION AND ROLE

Q1. Which of the following best describes your institution?

University-based

Part of a primarily privately-funded university, e.g., Harvard's Museum of Comparative Zoology

Part of a primarily public-funded university, e.g., University of Florida Natural History Museum, Zoological Museum, Univ. Copenhagen, Museu Nacional - UFRJ - Brazil, Bolus Herbarium (University of Cape Town)

Not university-based

Primarily funded by national, state or city government, e.g., Smithsonian's National Museum of Natural History, Museum National d'Histoire Naturelle (Paris), Virginia Museum of Natural History, IVPP (People's Republic of China), Rio de Janeiro Botanical Garden, National Museums of Kenya

Primarily privately-funded institution/museum, e.g., Carnegie Museum of Natural History, California Academy of Sciences (San Francisco), New York Botanical Garden

Individual Private collection, e.g., American Entomological Institute

Q2. What is/are the primary role(s) you play at your institution? Please check all that apply.

Director/President/CEO

Head of Research and Collections

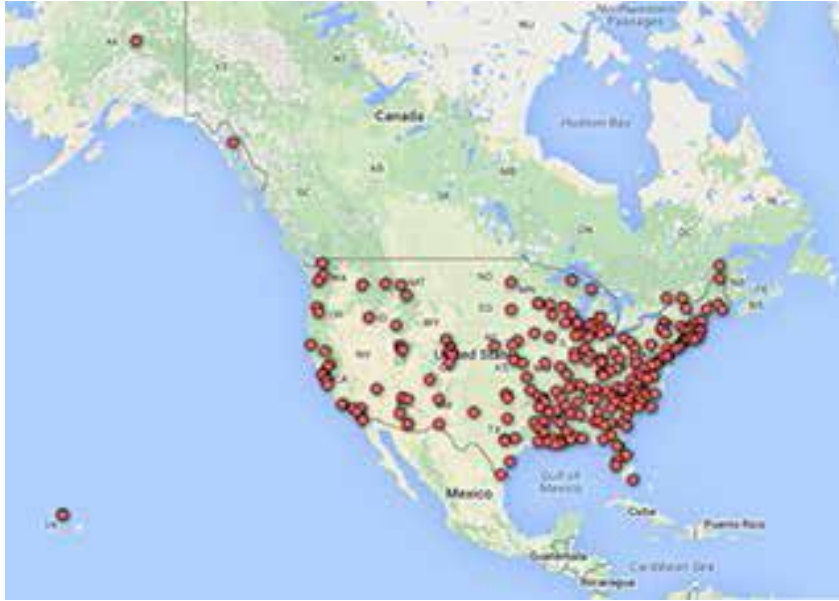
Curator

PRELIMINARY SURVEY RESULTS



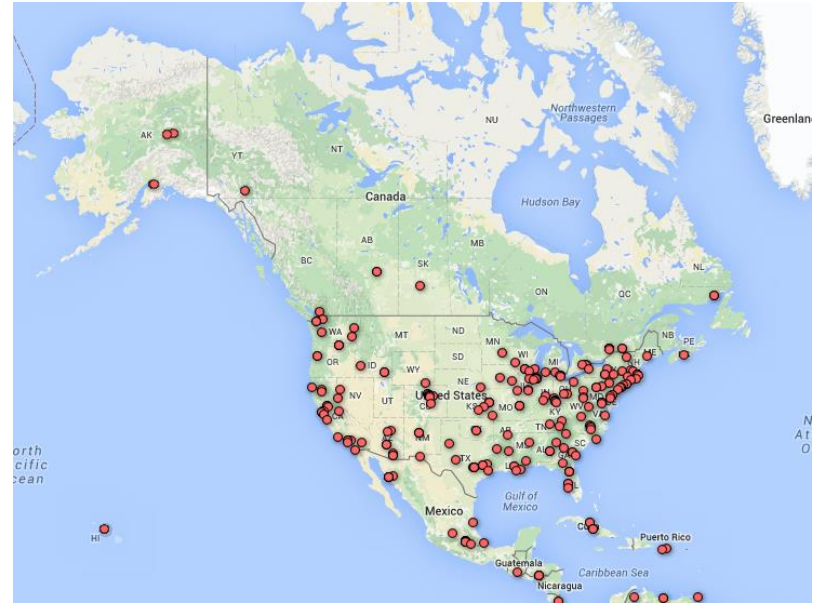
- c. 600 responses
- USA among best response rate
- Survey closes Nov 20, 2015, hence responses still coming in

NORTH AMERICA RESPONSES



ADBC PROJECTS

Image taken from iDigBio Summit V program



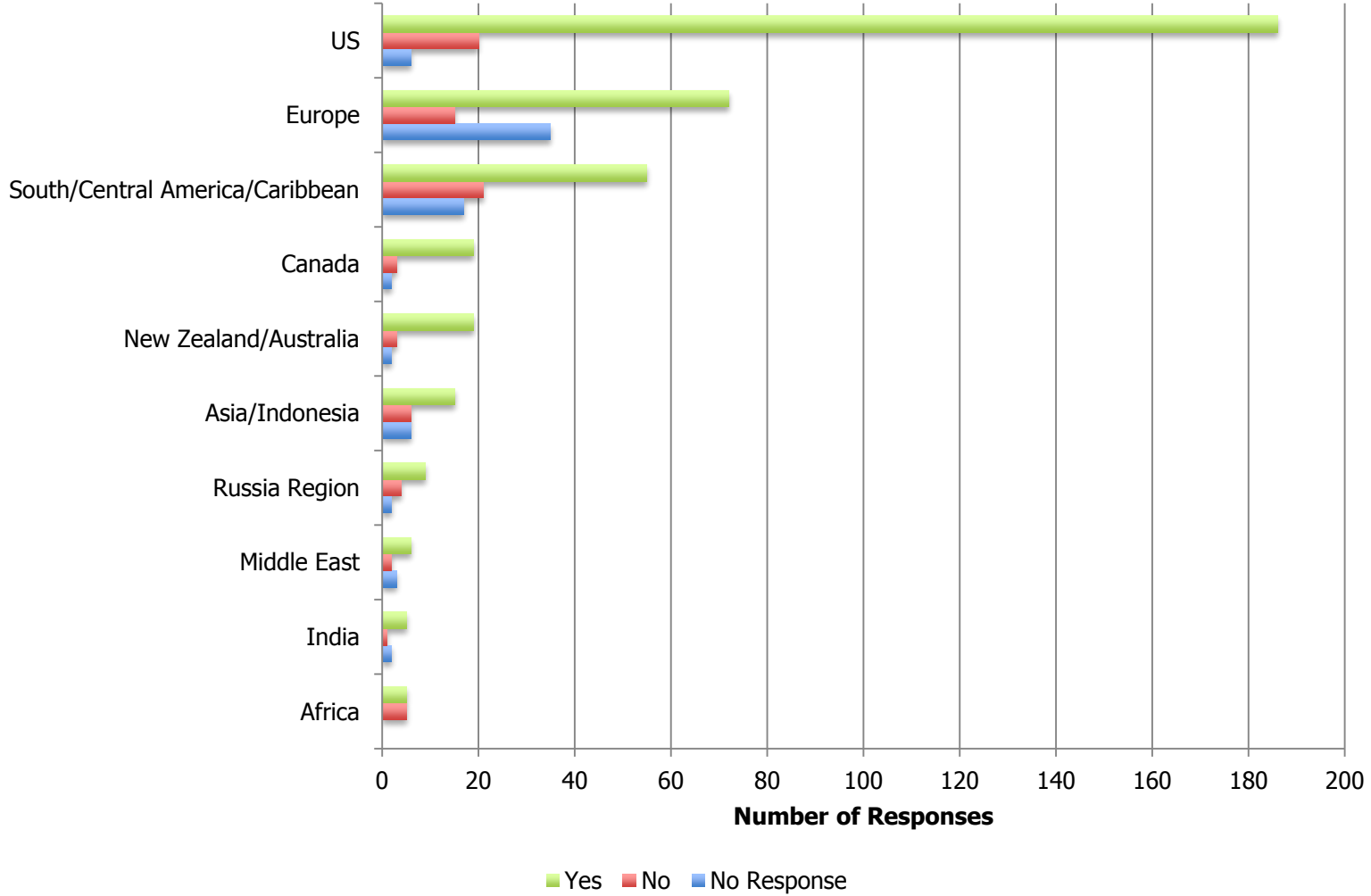
SURVEY RESPONSES

Number and Percent of Respondents from Each Collection Type

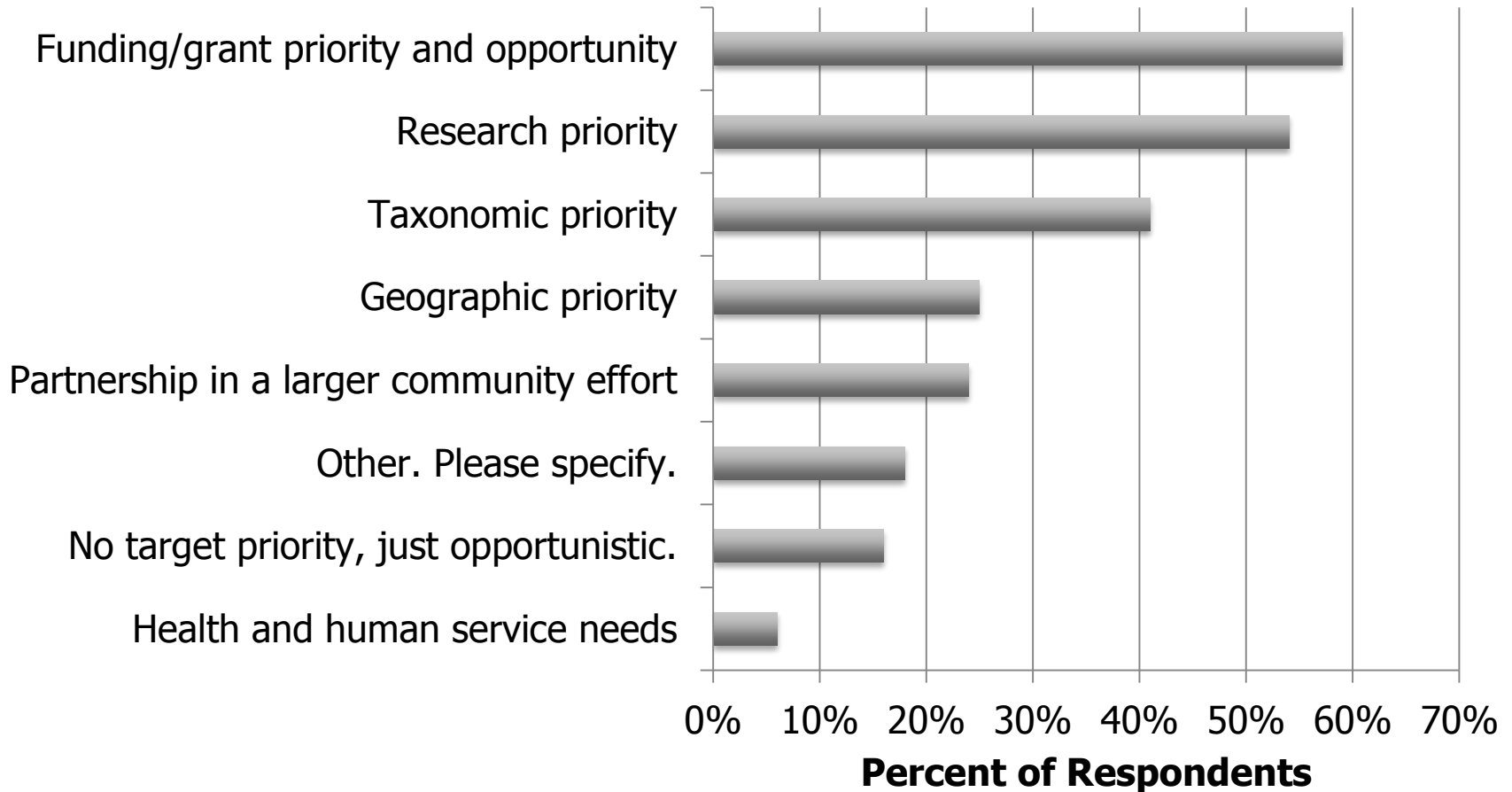
Vascular Plants	337	63%	Ichthyology	63	12%
Bryophytes	187	35%	Malacology	58	11%
Fungi & lichens	182	34%	Invertebrates, terrestrial	55	10%
Algae	143	27%	Marine Invertebrates	54	10%
Arthropods	116	22%	Paleobotany & Palynology	42	8%
Mammalogy	67	13%	Vertebrate Paleontology	41	8%
Ornithology	68	13%	Other	48	9%
Herpetology	63	12%	Invertebrate Paleontology	40	7%

Percent of Collection Being Databased & Shared/Published				
Collection	#	Databased	#	Shared
Vascular Plants	n = 239	46%	n = 231	37%
Bryophytes	n = 141	37%	n = 132	28%
Fungi & lichens	n = 141	47%	n = 123	38%
Algae	n = 112	36%	n = 101	37%
Arthropods	n = 87	31%	n = 77	28%
Mammalogy	n = 58	67%	n = 27	47%
Ornithology	n = 54	65%	n = 51	30%
Herpetology	n = 52	65%	n = 49	34%

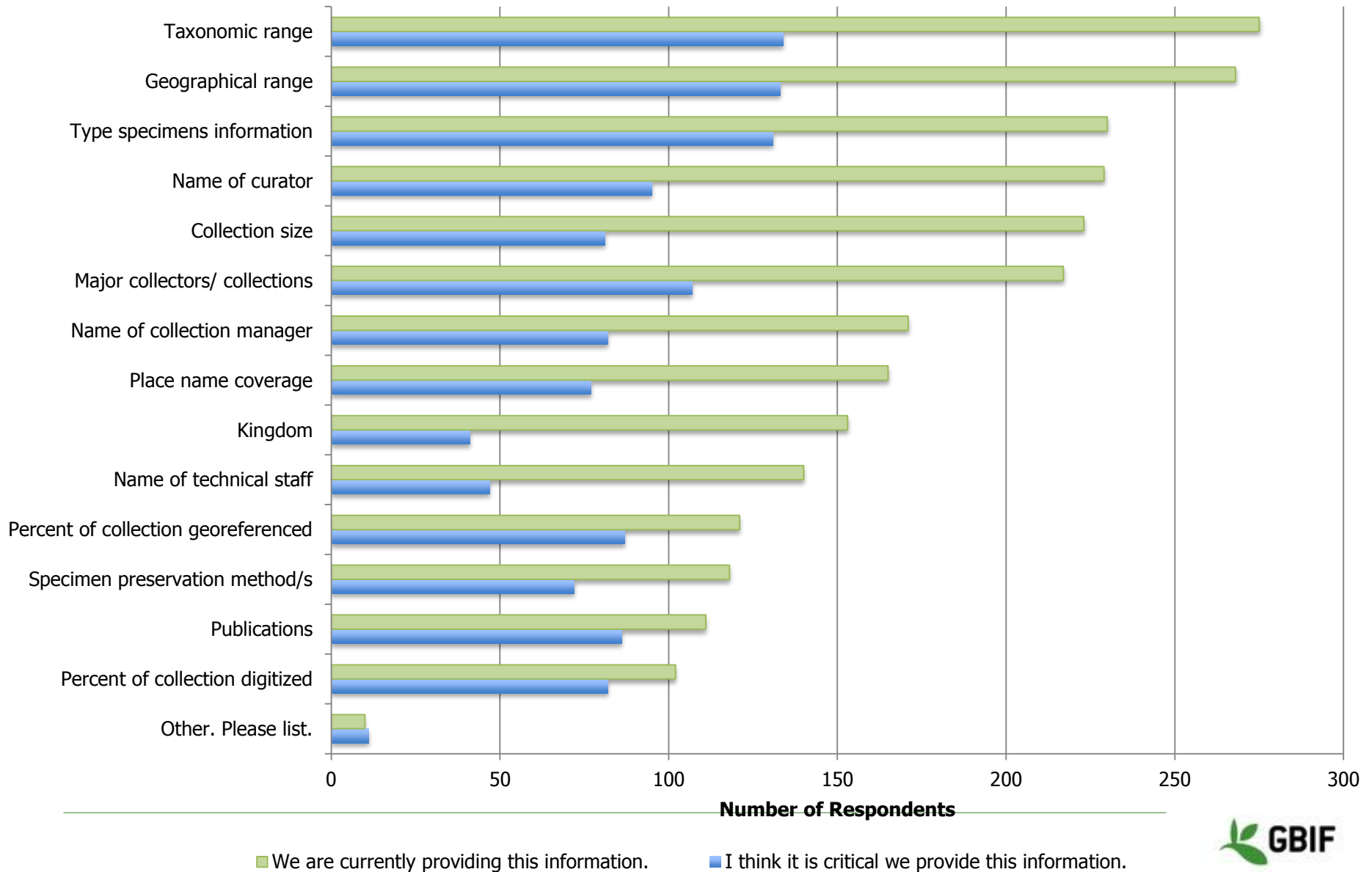
Digitization by Region



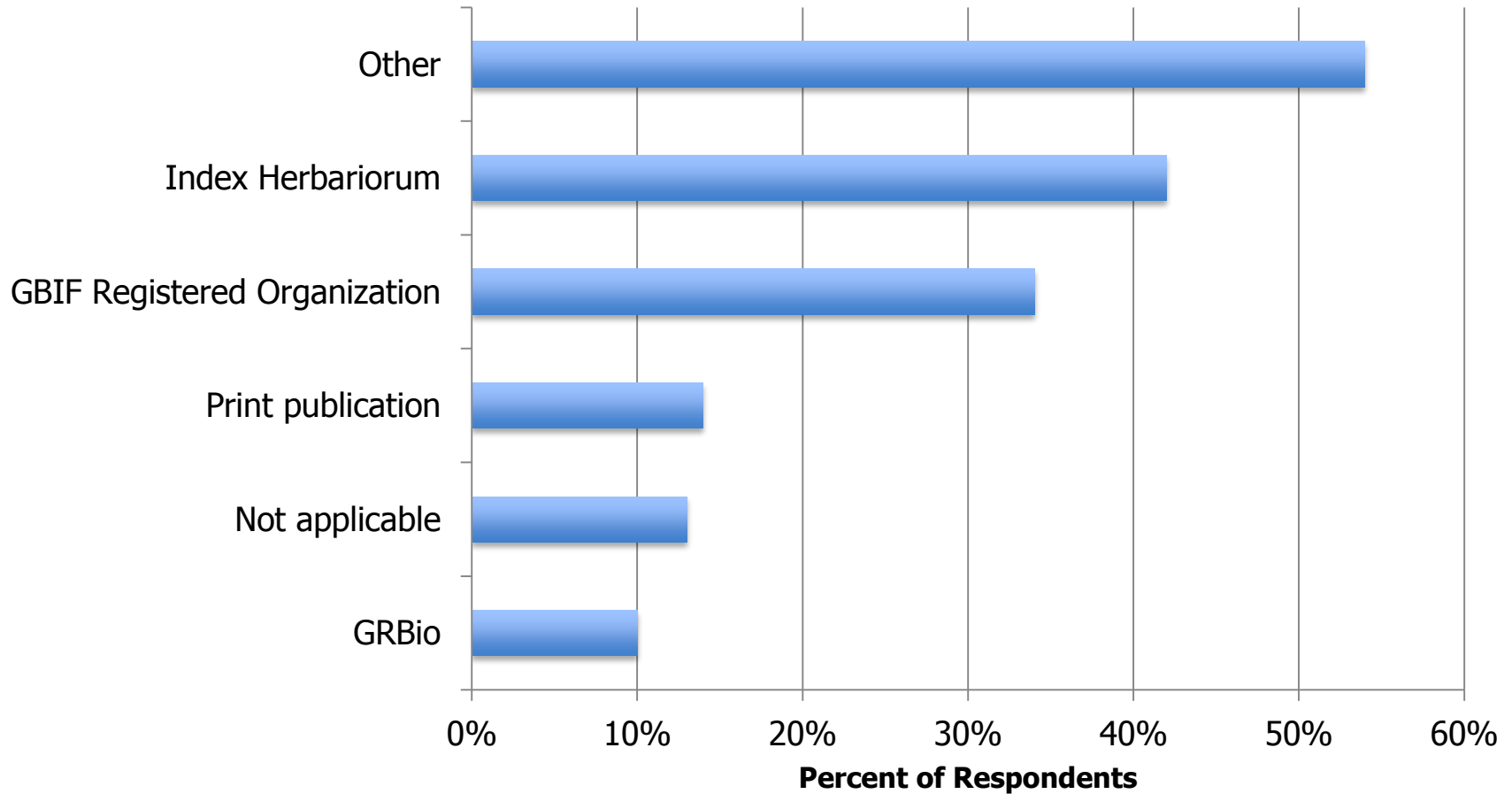
MOTIVATION FOR DIGITIZING



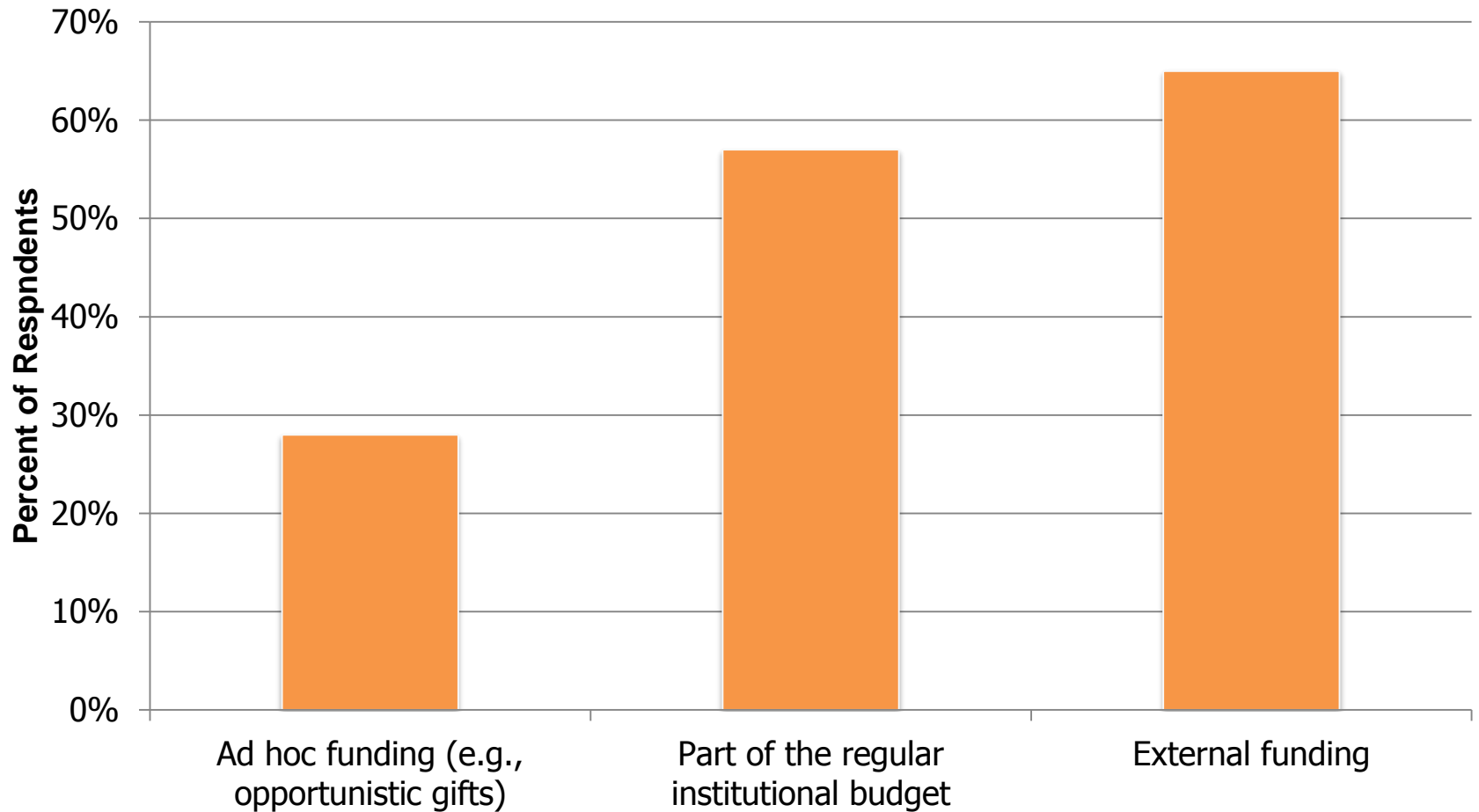
IMPORTANCE OF METADATA



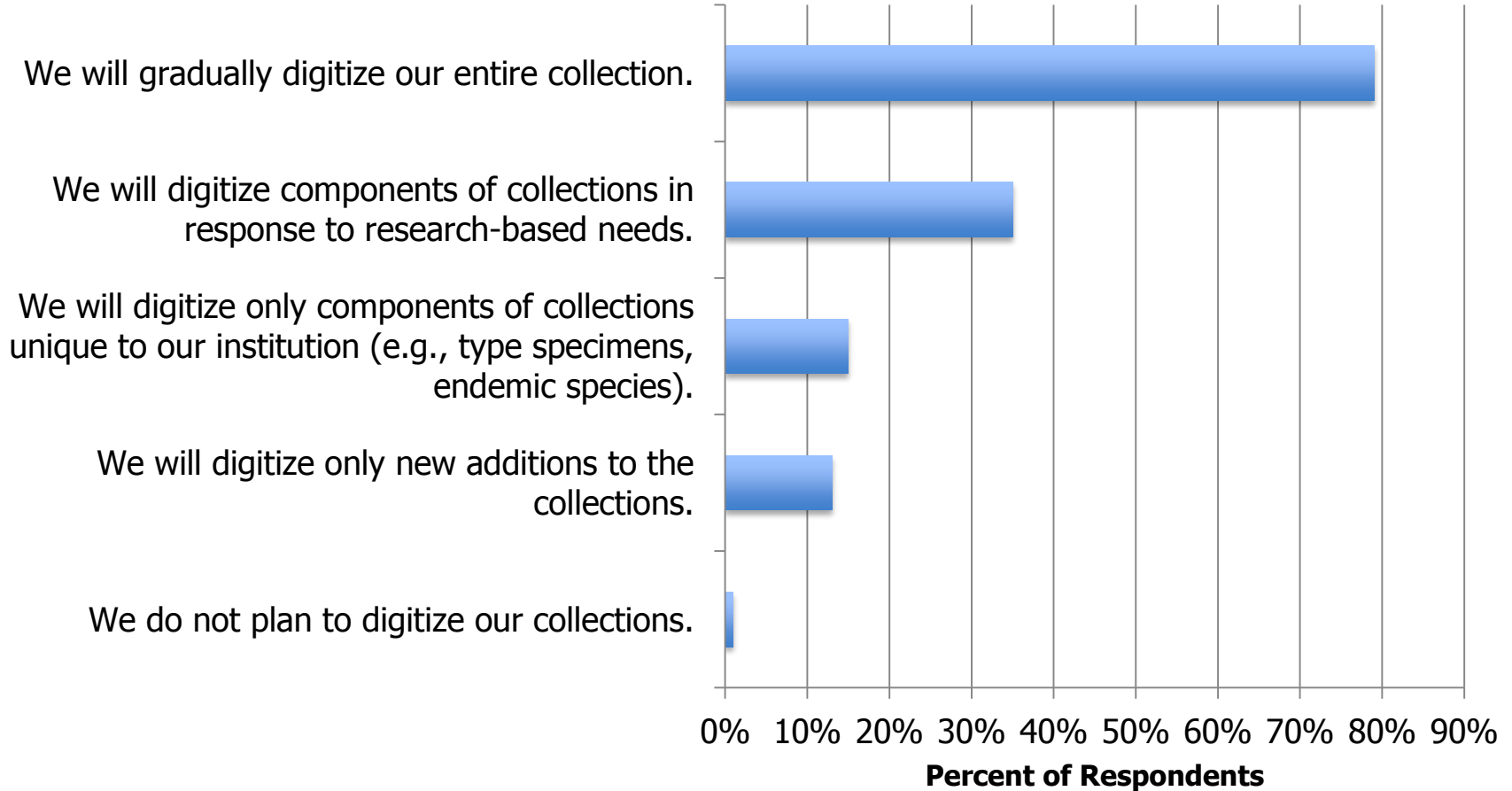
WHERE METADATA IS SHARED – 60 LOCATIONS



SOURCES OF FUNDING



LONG TERM PLANS



TOP 5 REASONS FOR NOT DIGITIZING

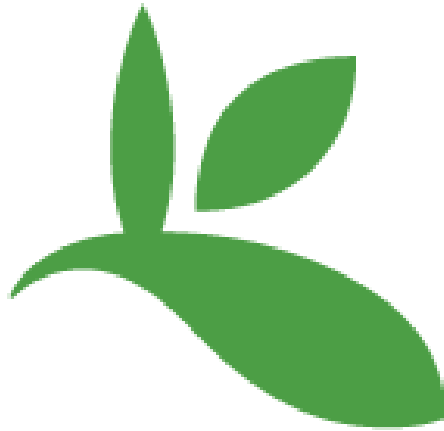
1. Funding/resources not available
2. Lack of time among personnel
3. Limited expertise among personnel
4. Not a priority of the individual in charge of the collection
Insufficient information on digitization process and protocols
5. Size of task is overwhelming

NEXT STEPS

Task Force recommends that the

DATA → KNOWLEDGE → APPLICATION

value chain framework be used to mobilize resources and prioritize digitization



GBIF.org

THANK YOU | GRACIAS

Siro Masinde
smasinde@gbif.org

[@gbif](#)

[gbifnews](#)

gbif.org/mendeley

[linkedin.com/grp/home?gid=55171](https://www.linkedin.com/grp/home?gid=55171)

github.com/gbif

Twitter

Facebook

Research uses

LinkedIn Group

Github