



Методы оцифровки данных по флоре и фауне
и размещение на международной платформе биологического
разнообразия Карагандинский университет
имени академика Е.А. Букетова,
3-15 апреля 2023 г.

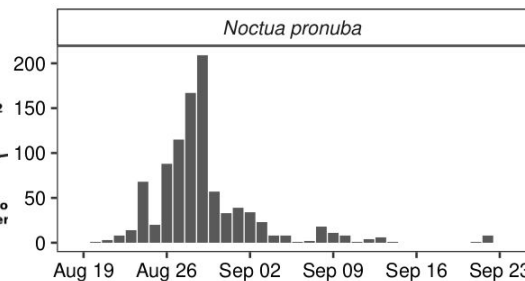
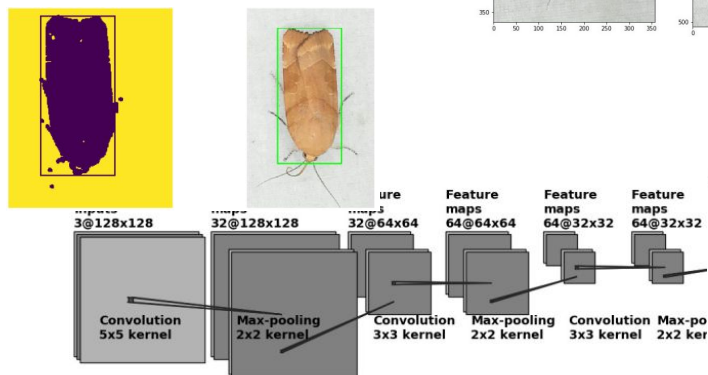
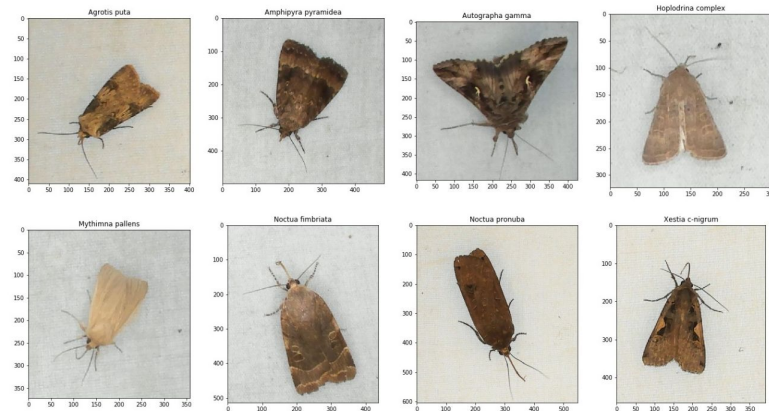
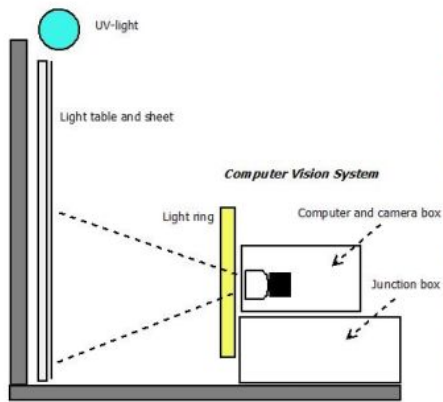


Введение в информатику биоразнообразия

Максим Шашков

An Automated Light Trap to Monitor Moths (Lepidoptera) Using Computer Vision-Based Tracking and Deep Learning

Bjerger et al., 2021 DOI: [10.3390/s21020343](https://doi.org/10.3390/s21020343)

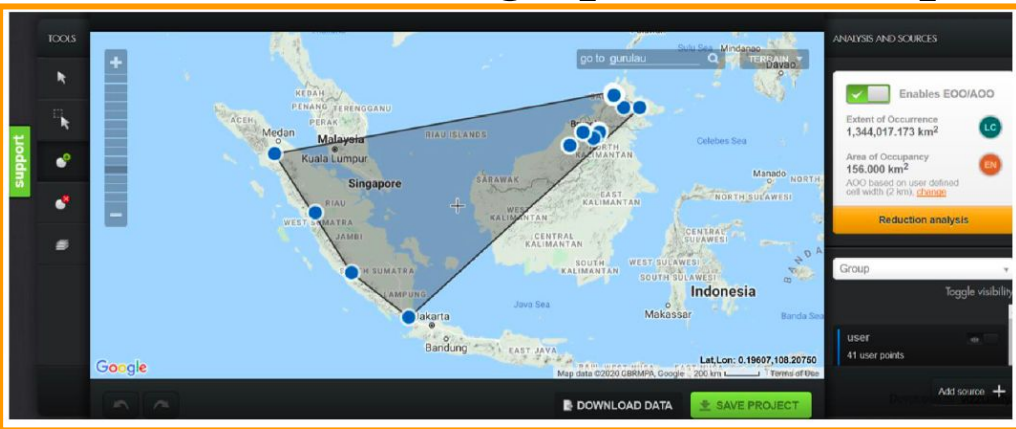


Discrimination of Deciduous Tree Species from Time Series of Unmanned Aerial System Imagery

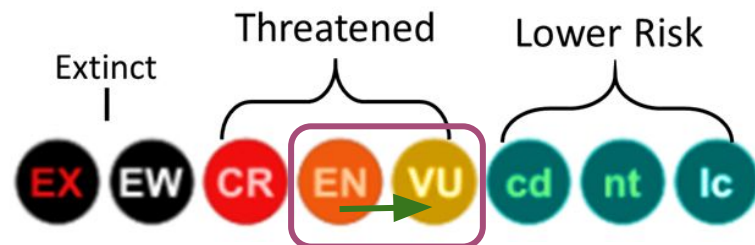
Lisein et al., 2015 10.1371/ journal.pone.0141006



Improving the accuracy of Red List assessments using open-access species occurrence data



Robiansyah, Wardani, 2020
10.13057/biodiv/d210831



GeoCAT – Geospatial Conservation Assessment Tool

GeoCAT is a web tool that harnesses primary biological data for semi-automated IUCN Red List assessment and analysis.

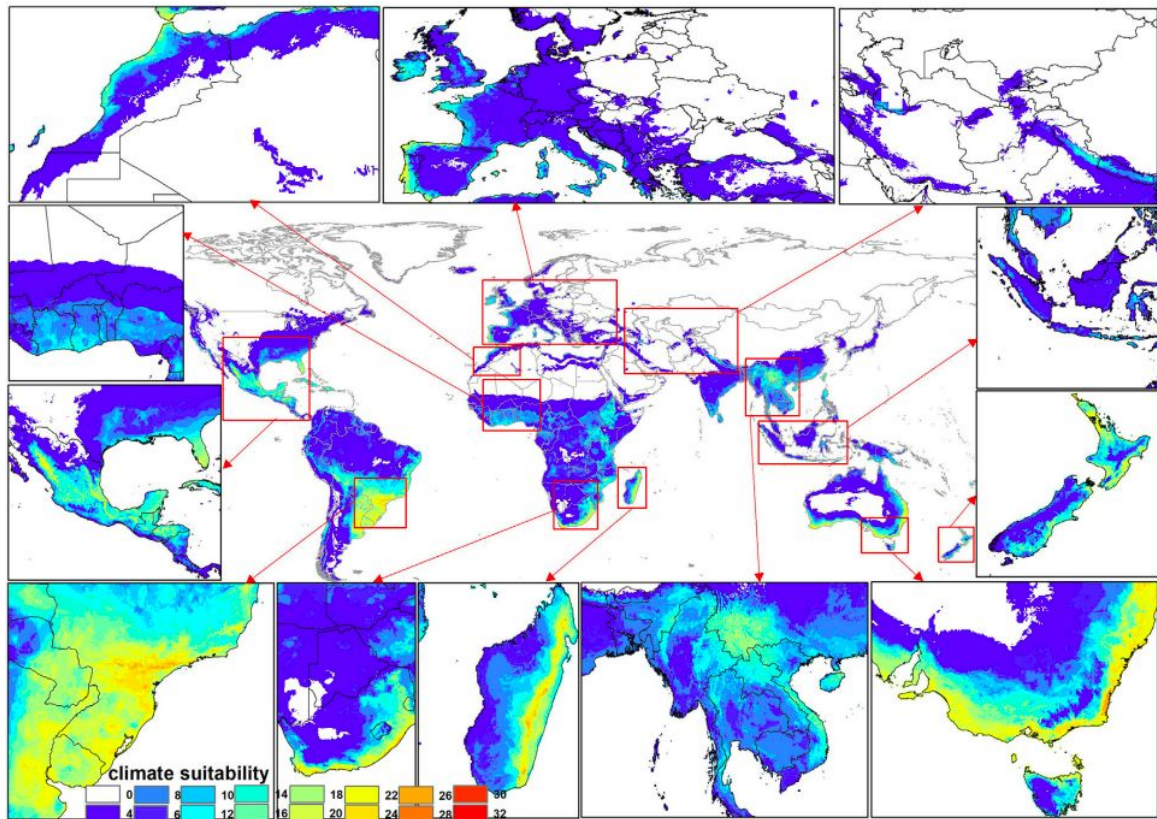


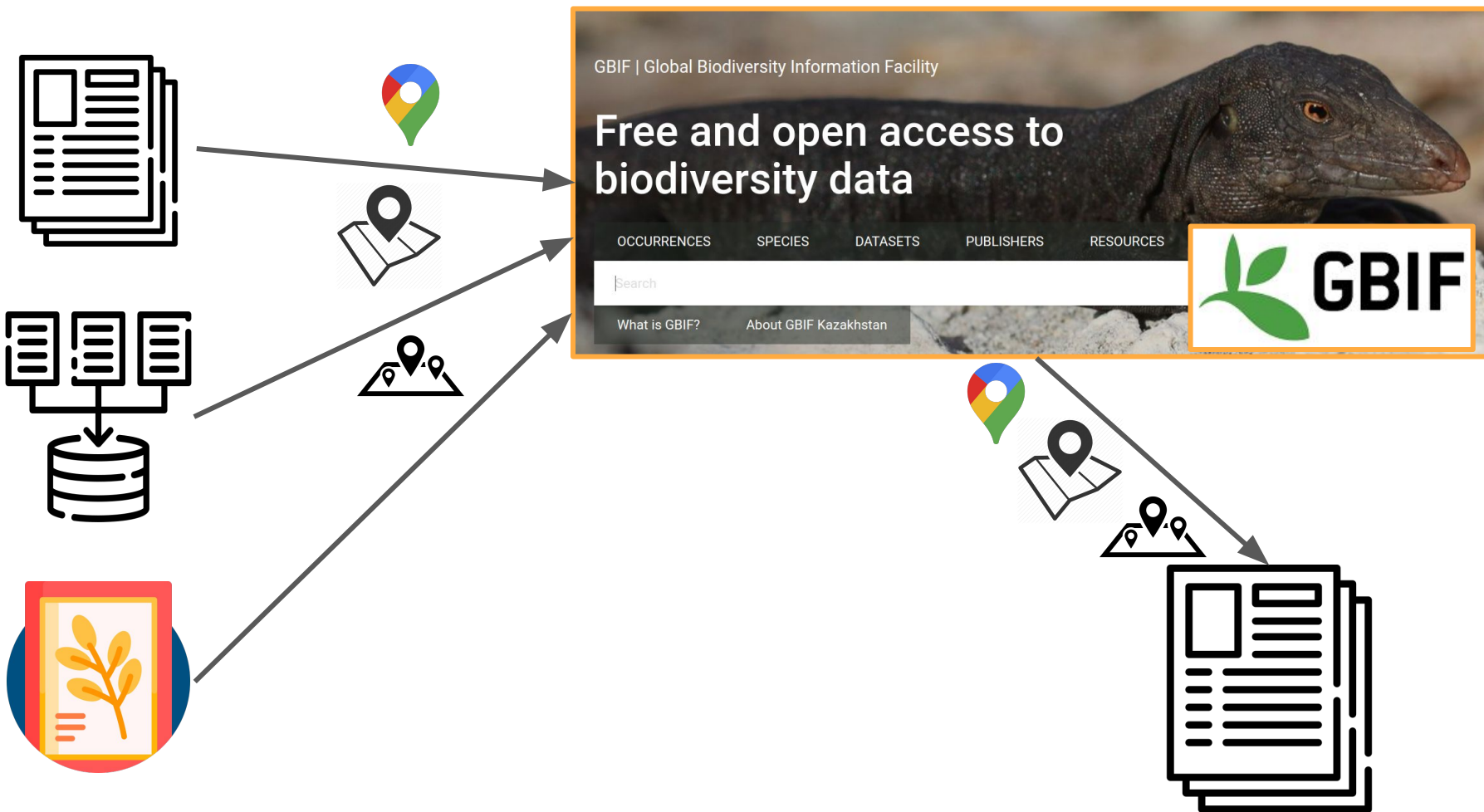
Invasive weed species' threats to global biodiversity: Future scenarios of changes in the number of invasive species in a changing climate

Shabani et al., 2020
10.1016/j.ecolind.2020.106436

оцени изменений ареалов
согласно климатическим
сценариям Representative
Concentration Pathways (RCP)

32 вида, ареалы по большей
части сокращаются, за
исключением Европы, севера
Бразилии, востока США и юго-
востока Австралии





Биологические коллекции



национальный
гербарий в Париже
Р более 6 млн листов
основан в 1635 году

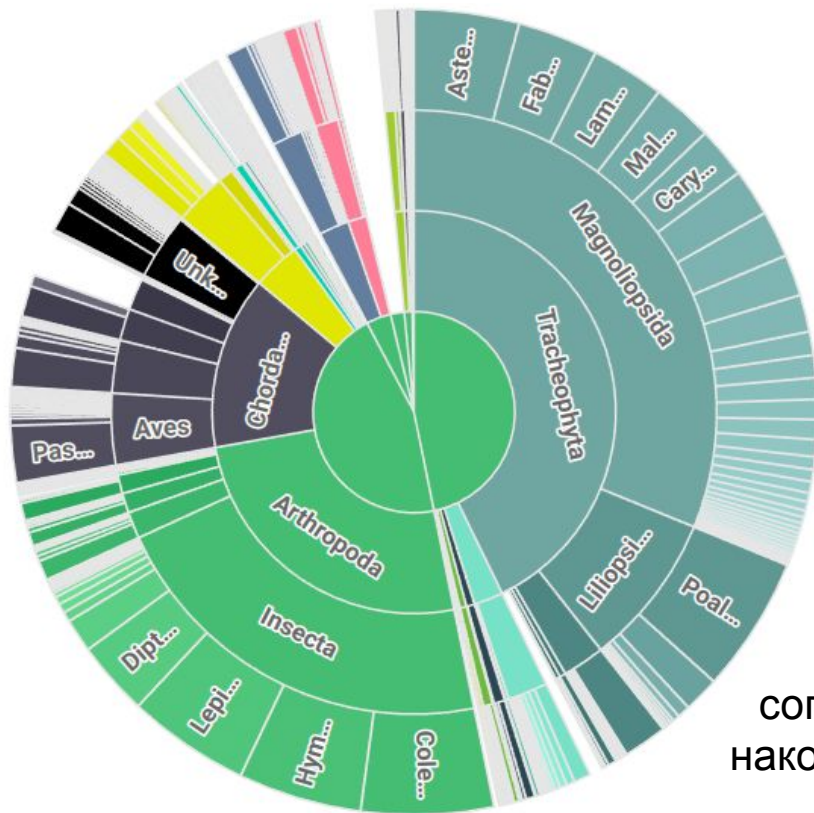
по разным оценкам до 2 млрд образцов
Arturo H. Ariño, 2010 [10.17161/bi.v7i2.3991](https://doi.org/10.17161/bi.v7i2.3991)
Quentin Groom [10.1093/database/baz129](https://doi.org/10.1093/database/baz129)



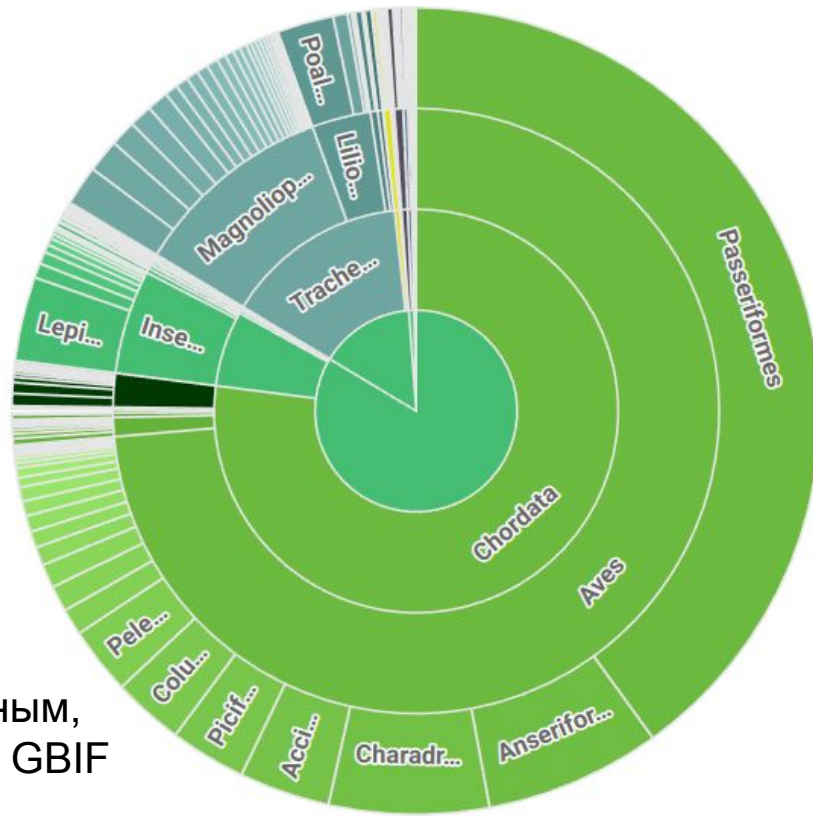
J.B. Wallis-Roughley Museum of
Entomology at the University of Manitoba

Preserved Specimen vs Human Observation

~ 220 млн находок - коллекции (образцы)

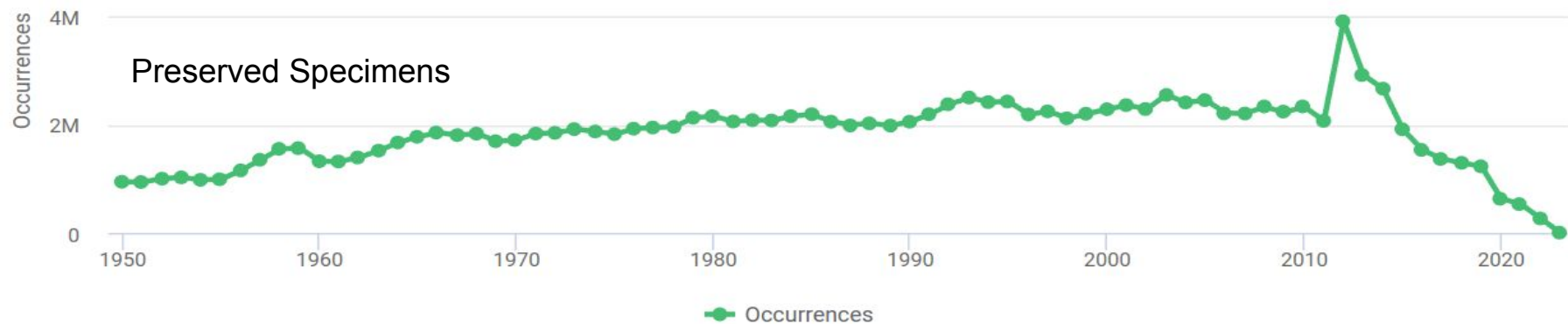
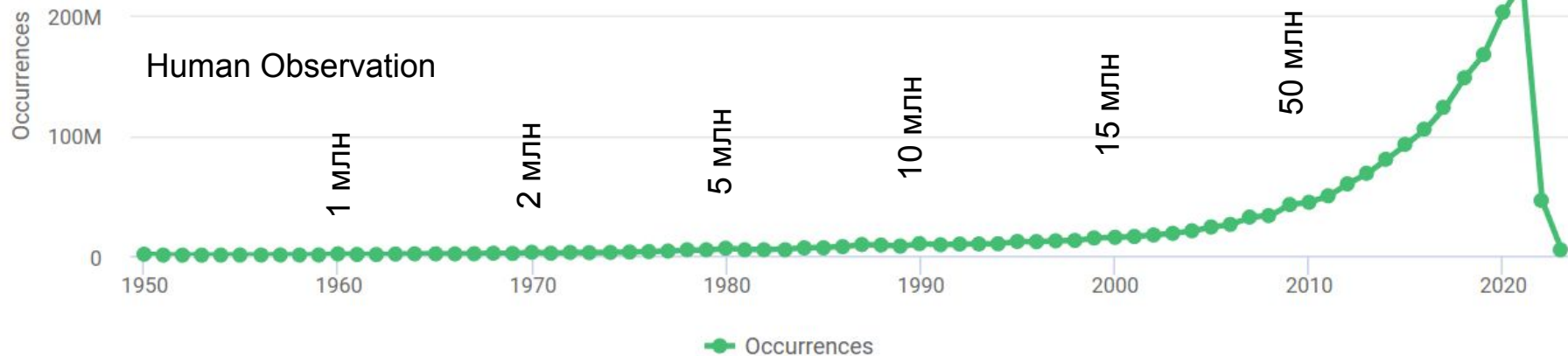


~ 1 950 млн находок - наблюдения (только записи)



согласно данным,
накопленным в GBIF

Число находок по году сбора



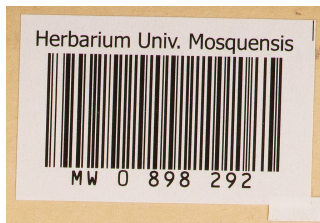
Гербарии – Index Herbariorum



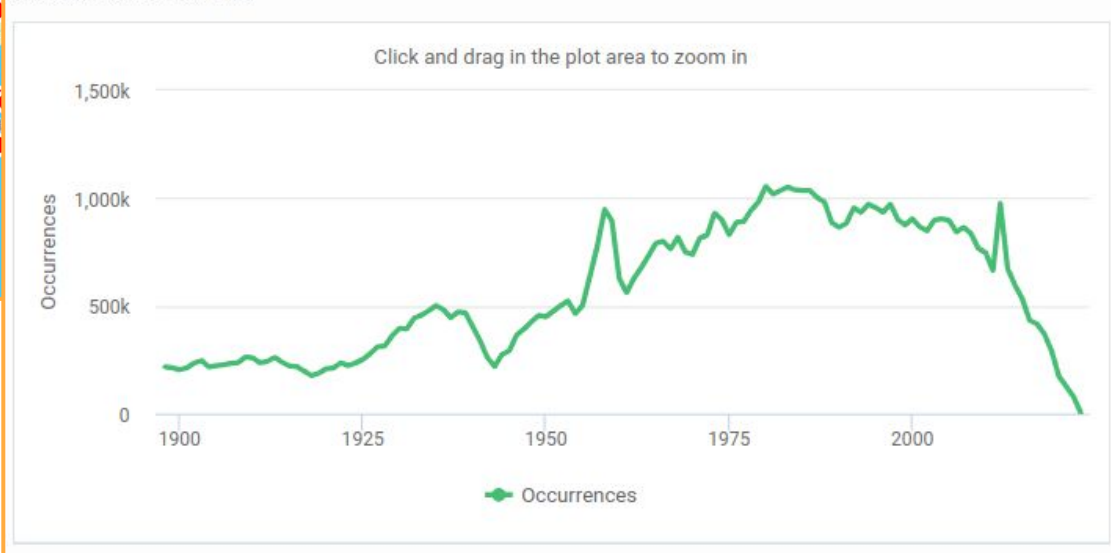
3100 гербариев

390 млн. ЛИСТОВ

в GBIF около 77 млн - 20%



OCCURRENCES PER YEAR



Kazakhstan

54,158
OBSERVATIONS

6,748
SPECIES

2,627
IDENTIFIERS

1,106
OBSERVERS

Map Grid List Places of Interest Redo search in map

Kazakhstan

Unknown
№ 56 Mehkolonna, A... • Jan 8, 2023
2h

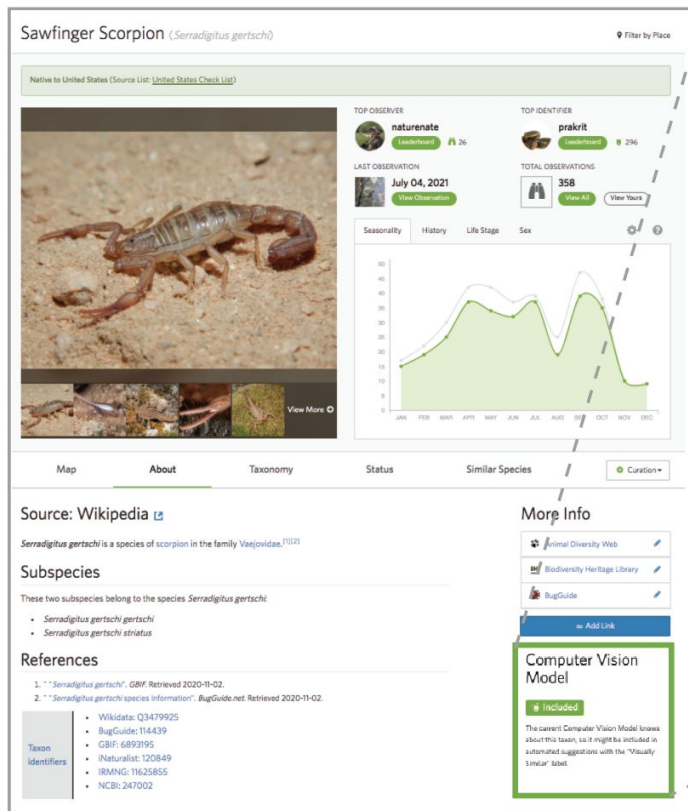
Veronica persica
(Bird's-eye Speedwell)
уг.ул.Фурманова, Т... • Today
4h

Pieris rapae
(Small White)
Урджарский район, ... • Jun 19, 2014
Research Grade 3 5h

Convolvulus lineatus
(Narrow-leaved Bindweed)
Урджарский район, ... • Jun 19, 2014
5h

Lepus tolai

Neural network – Computer Vision Model v. 2.2



Computer Vision Model

Included

The current Computer Vision Model knows about this taxon, so it might be included in automated suggestions with the "Visually Similar" label.

19 февраля 2023 года
72 511 таксонов

Сеть специалистов



vitalfranz

Message

Stop following vitalfranz

Mute

Profile

Observations

Calendar

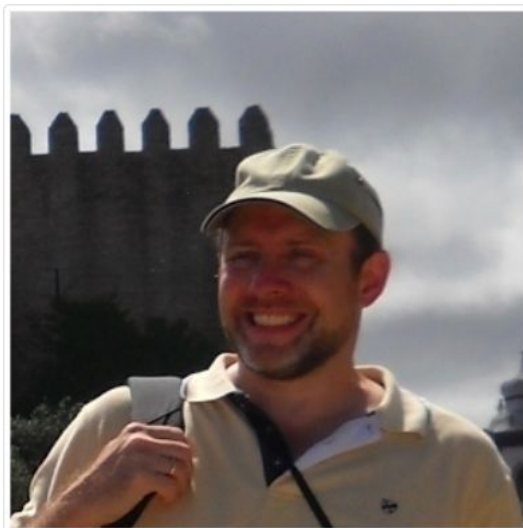
IDs

Lists

Journal

Favorites

Projects



Francesco Vitali Curator ?

Joined: Nov 13, 2009 Last Active: Mar 09, 2023 iNaturalist

Entomologist, with a focus on both living and fossil worldwide Coleoptera Cerambycoidea (Cerambycidae, Disteniidae, Vesperidae, Oxypeltidae).

Creator and administrator of the site www.cerambycoidea.com

Personal site: <http://www.cerambycoidea.com/francescovitali/>

List of publication: https://www.researchgate.net/profile/Francesco_Vitali2

Scientific contribution: <http://www.cerambycoidea.com/francescovitali/contributions.htm>

 <https://orcid.org/0000-0003-3052-2910>

Following 0 People

vitalfranz is not following anyone.

 Observations

325

 Species

253

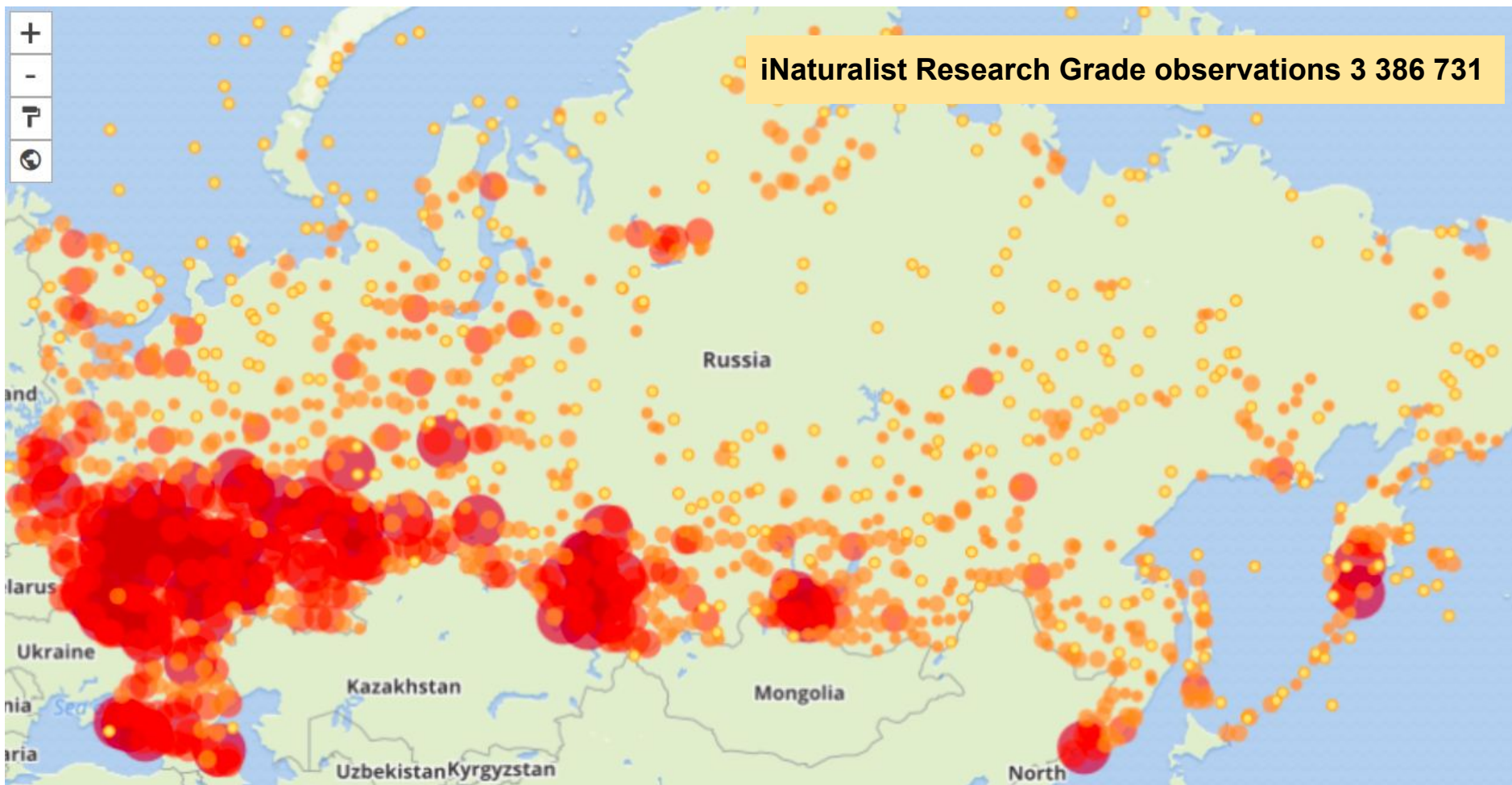
 Identifications

103220

Opportunistic observations vs Research data



iNaturalist Research Grade observations 3 386 731



Стандарты

название стран и территорий: ISO 3166-1 **KZ**

дата: ISO 8601 YYYY-MM-DD **2023-04-03**

координаты: десятичные градусы **49.768, 73.123**

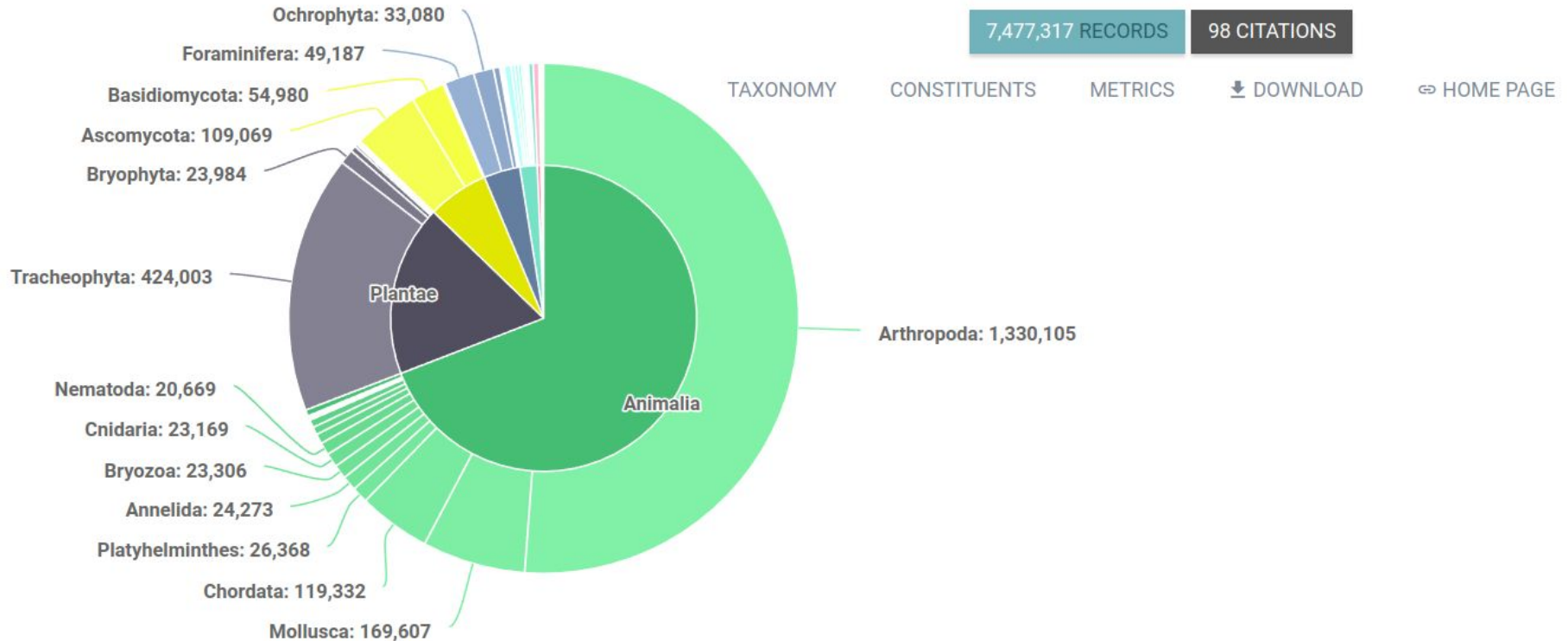
...



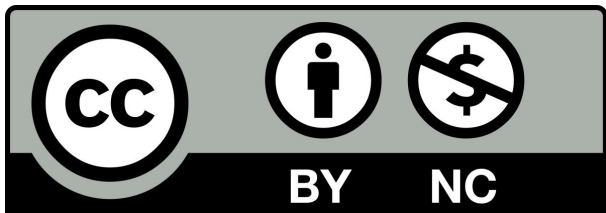
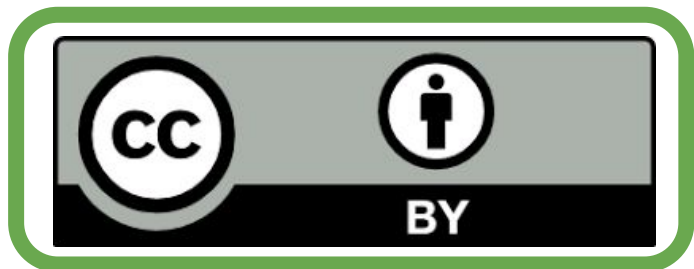
Таксономия

GBIF Backbone Taxonomy

Published by [GBIF Secretariat](#)



Лицензии - Creative Commons



CREATIVE COMMONS LICENSES		COPY & PUBLISH	ATTRIBUTION REQUIRED	COMMERCIAL USE	MODIFY & ADAPT	CHANGE LICENSE
	PUBLIC DOMAIN	✓	✗	✓	✓	✓
	CC BY	✓	✓	✓	✓	✓
	CC BY-SA	✓	✓	✓	✓	✗
	CC BY-ND	✓	✓	✓	✗	✓
	CC BY-NC	✓	✓	✗	✓	✓
	CC BY-NC-SA	✓	✓	✗	✓	✗
	CC BY-NC-ND	✓	✓	✗	✗	✓

You can redistribute (copy, publish, display, communicate, etc.)

You have to attribute the original work

You can use the work commercially

You can modify and adapt the original work

You can choose license type for your adaptations of the work.