



Invasive Alien Species Europe smartphone application

Case study on the use of the citizen science

Ana Cristina Cardoso- JRC EASIN Team

5th meeting of the Invasive Alien Species Expert Group (IASSEG) June 18, 2020

IAS Europe App: main functionalities

Invasive species

searching, filtering and visualizing photos of species

My species records

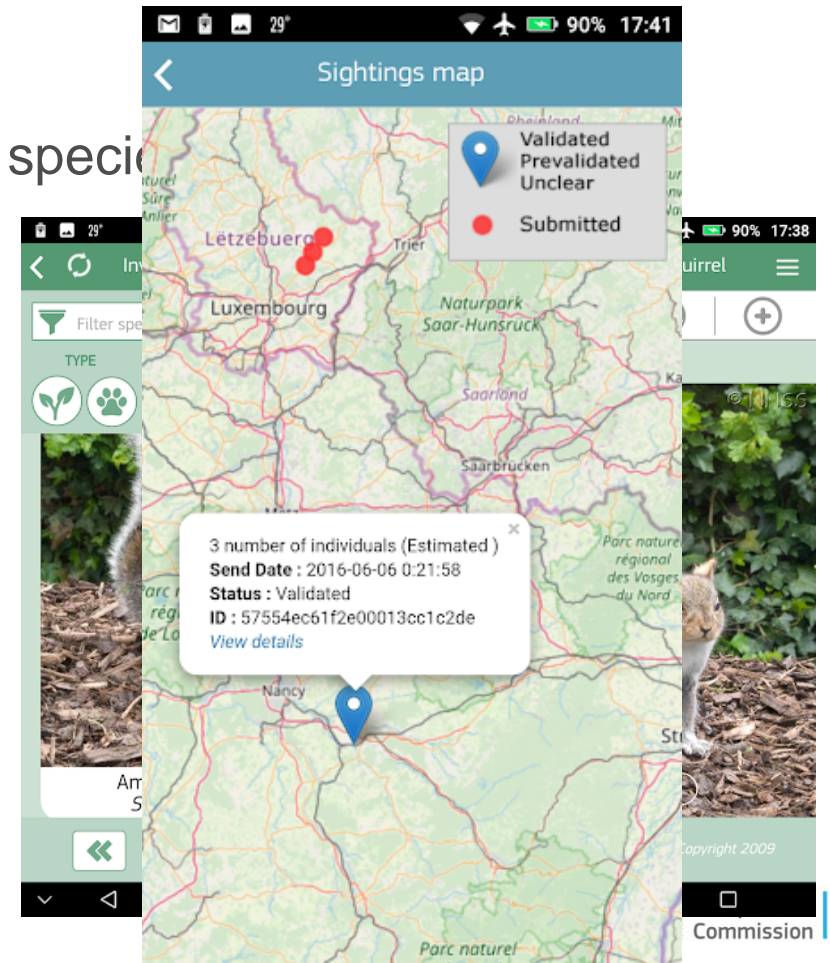
view all sightings submitted

Report a sighting

enter a new sighting

Sightings map

displaying all sightings of IAS collected via the App



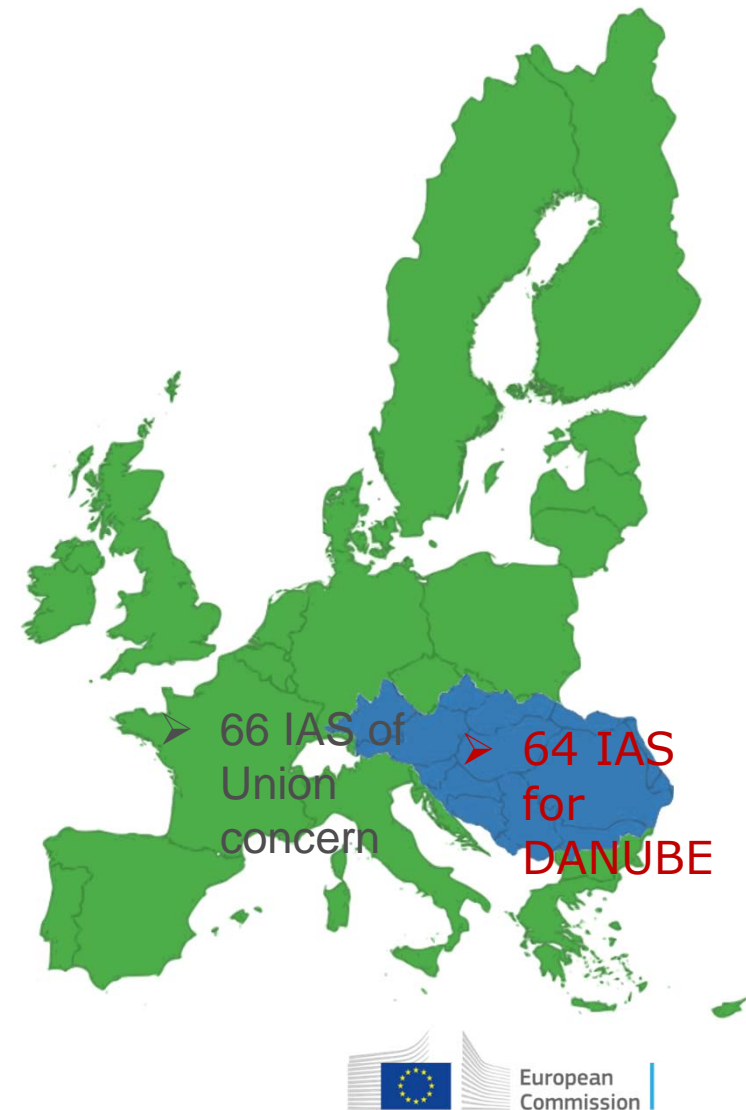
IAS Europe App: updates

Languages:

- DE, EL, EN, ES, IT, RO
- New login (EU login, plus other platforms)
- Branding

Downloadable IAS Catalog (always up to date):

- 66 IAS of Union concern
2016: 37 species; 2017: 11 species; 2019: 1 species; 2019: 17 species
- 64 additional IAS of relevance for the Danube River Basin



Pilot-study (data collection) on IAS in the Danube (2017)



Joint Danube Survey- IAS sampling (2019)



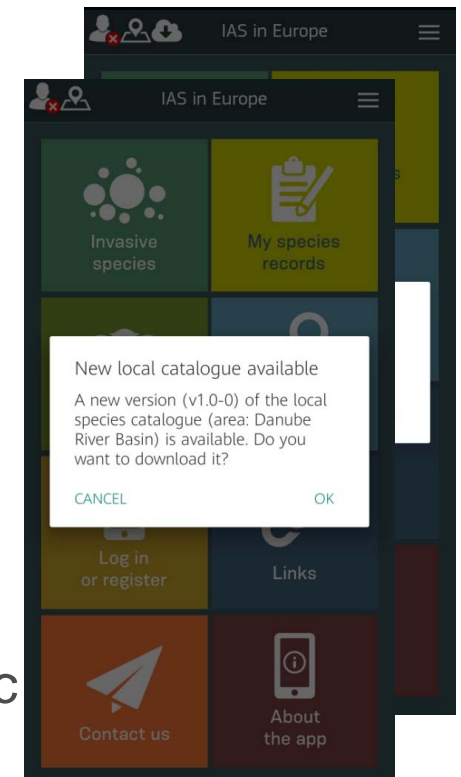
European Alien Species Information Network - EASIN
@EU_Aliens

#JointDanubeSurvey 2019 #ICPDR #JDS4: IBISS teams in good mood despite the weather, preparing for field sampling along the river in Serbia, making use of observation #protocols such as the one for #phytobentos, and #smartapp.



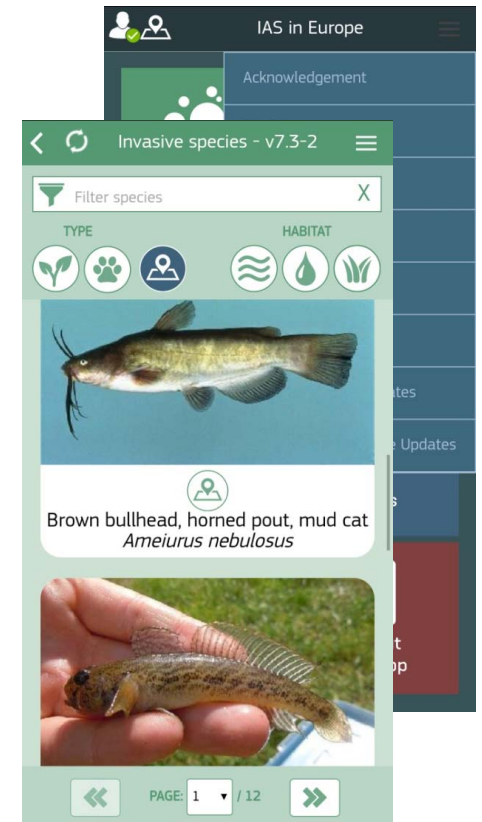
Supporting IAS of a specific local area

- Specific local areas - areas of macro-regional or national concern (e.g. Danube River Basin)
- 64 factsheets prepared for species of regional interest in collaboration with International Commission for the Protection of the Danube River (ICPDR)
- Conditions to be met for download and reporting regional species:
 - ✓ mobile device location functionality turned on
 - ✓ device detects that it is located in a specific local area
 - ✓ device informs the user to be close to or inside a specific area



Supporting IAS of a regional area

- Manually download the Regional Species Catalogue
- Filtering option of species available while the device is located in a specific area
- 64 local species
 - ✓ 21 Fish
 - ✓ 43 Invertebrates



Validation of citizens' observations

Records are validated by the EASIN team, with the contribution of the EASIN Editorial Board

<https://easin.jrc.ec.europa.eu/eb/Home/Board>


JOINT RESEARCH CENTRE
European Alien Species Editorial Board

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EASIN Editorial Board Members

Margarita ARIANOUTSOU




Margarita Arianoutsou is an Professor of Ecology in the Department of Ecology and Systematics of the Faculty of Biology of National and Kapodistrian University of Athens.

She has a considerable experience in the research field of Ecology and Management of Mediterranean ecosystems in which she is actively engaged for the last 25 years. She has been elected and acted twice as the Secretary of the International Society of Mediterranean Ecologists (ISOMED) between 1987-1991 and from 2000 onwards. She has been a member of the working group established to support the Hellenic National Committee for the Implementation of UN Convention to Combat Desertification. Among other activities and commitments, she is a member of the Scientific Committee of the European Centre of Forest Fires. She has participated in more than 50 International Symposia - Conferences. She has published more than 60 scientific articles and she has edited 4 books published by (Dr Junk) Kluwer, Plenum Press and Millpress. She has supervised 10 Ph. D theses and more than 20 First Diploma Theses. She is actively involved in Environmental Education and Awareness Campaigns, for which she has also published a book.

Margarita was responsible for the revision of the information on terrestrial plant species of the EASIN Catalogue and is currently a member of the EASIN Editorial Board, assigned for terrestrial plants.

Thierry BACKELJAU




Thierry Backeljau is senior lecturer in genetics at the University of Antwerp and is head of the Operational Directorate Taxonomy and Phylogeny at the Royal Belgian Institute of Natural Sciences, Brussels.

He has a broad interest in invertebrate taxonomy, phylogeny and population genetics, with a particular focus on terrestrial gastropods.

As such, he has been President of Unitas Malacologica, and he is member of the editorial boards of, amongst others, "Journal of Molluscan Studies", "Malacologia", and "Iberus", and he is subject editor for Gastropoda for "ZooKeys". Thierry has supervised 20 PhD- and >40 MSc-theses, and he was member of >65 PhD juries (own PhD students not included) in Austria, Belgium, France, Germany, Portugal, Spain, Sweden, The Netherlands, and the UK. He is (co-) author of >200 papers in impact factor journals, >55 papers in peer-reviewed journals without impact factor, and 39 popular science papers. He acts as reviewer for >70 scientific journals and for >20 research fund organizations in Australia, Austria, Belgium, EC, Israel, South-Africa, Spain, Sweden, The Netherlands, UK, and the USA.

Thierry has revised the EASIN list of the terrestrial snails and is currently a member of the EASIN Editorial Board, assigned for terrestrial snails.

Michel BARICHE



Michel Bariche is an Associate Professor of Biology at the American University of Beirut and curator of the Fishes and aquatic Invertebrates collections at the AUB Natural History Museum (Lebanon).

He earned a DEA in Animal and Plant Systematics at the Museum National d'Histoire Naturelle and a doctorate in Ichthyology from the

Validation support platform


CITIZEN SCIENCE PLATFORM
 Data Collection Hub
 European Commission > JRC > Citizen Science Platform > IAS Admin

Available Collection

EASIN


Filters

Species [*] Status [*] NUTS Area [*] From

Collection Reports 10 Reports loaded: 237 / selected: 1 Unselect

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<input type="checkbox"/>	59552074dff661b40a8a74e0	2017-06-29T15:44:52.000Z

Pages: First Prev 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 ...


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Collection: EASIN **Report ID:** 594c0075dff661b40a8a74de
Created: 2017-06-22T17:37:57 **Updated:** 2017-09-25T15:30:19
Status: Validated **User ID:** tim.adriaens@inbo.be

Species:

Abundance: [Enter to save]

Precision:

Habitat:

User Comment: [Enter to save]


Expert Comment: [Enter to save]

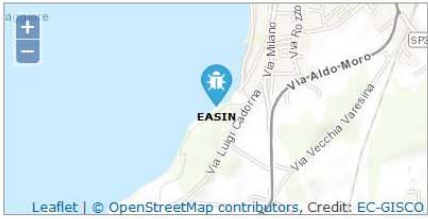
Computer Vision API:


- 91.48% outdoor
- 88.01% rock
- 61.30% nature
- 37.56% plant

GCloud Vision API:

- 82.37% lacertidae
- 81.45% plant
- 54.96% moss
- 54.66% non vascular land plant
- 54.14% grass

Picture (1/2)


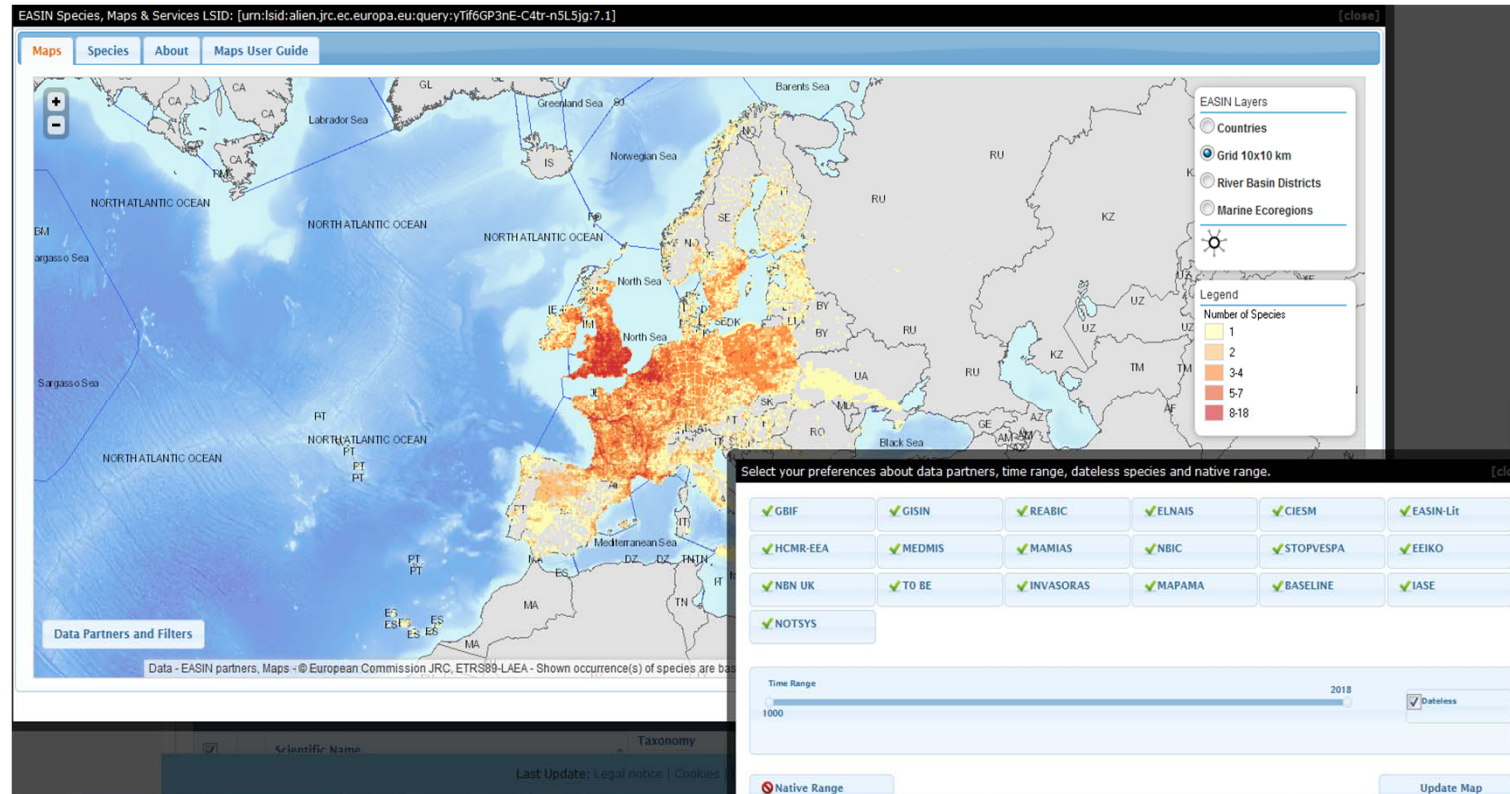
Location: 8.60509947, 45.80546556




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What happens to my contribution?

Integration of validated records into scientific information systems databases e.g. EASIN



On-going and future work

- Collaboration for integration of new local areas: Sava river basin, Iberian peninsula, Bulgaria, Croatia, Greece, Malta

➤ **Open to new collaborations**

- Collaboration with Croatian Ministry of Environment and Energy on reuse of the IAS Europe App source code to develop a Croatian App
- Translation in 7 additional languages
- Training on IAS to enhance engagement of citizens in monitoring of IAS
- Exploring automatized solutions for data validation

Keep in touch



<https://easin.jrc.ec.europa.eu/easin>



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Thank you



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