Herramientas de la UICN que pueden apoyar la implementación de la Meta 6

Trachemys scripta © European Commission, Artist: Massimiliano Lipperi

Meta 6 sobre especies exóticas invasoras

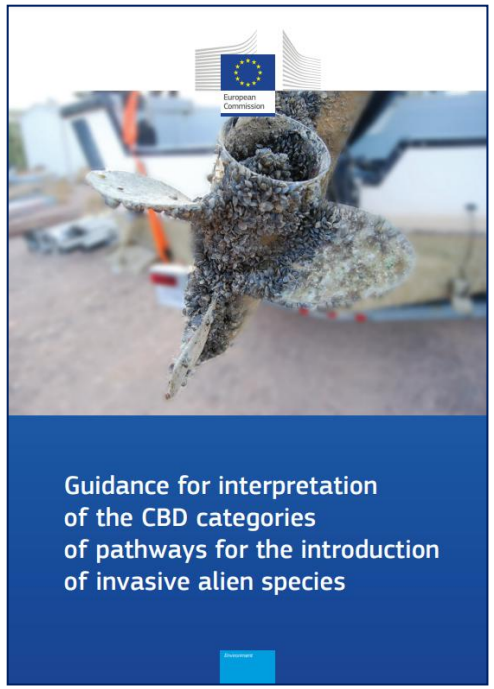
Eliminar, minimizar o reducir las especies exóticas invasoras o mitigar sus impactos en la biodiversidad y los servicios de los ecosistemas mediante:

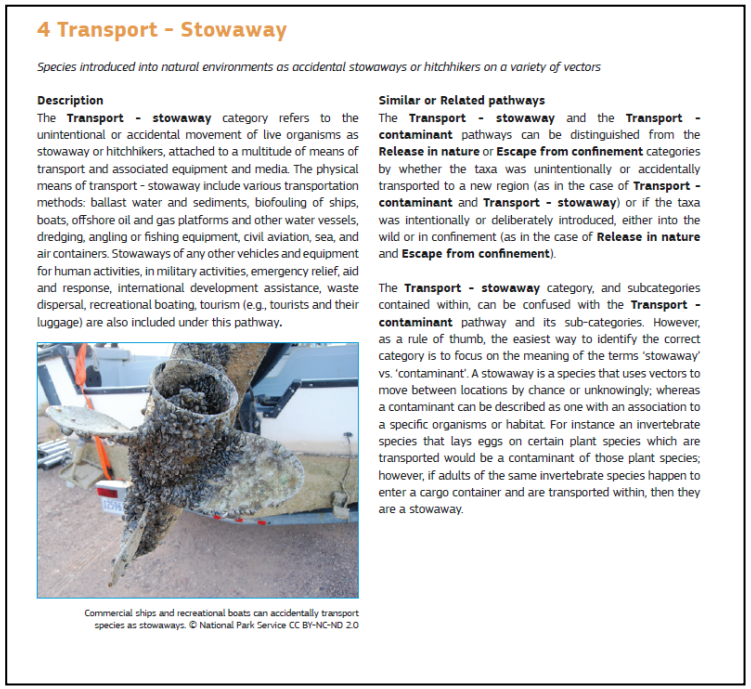
i. la detección y la gestión de las vías de introducción de las especies exóticas,	Vías	¿Cómo han las especies exóticas llegado hasta aquí o cómo podrían llegar?
ii. previniendo la introducción y el establecimiento de especies exóticas invasoras prioritarias, reduciendo las tasas de introducción y establecimiento de otras especies exóticas invasoras conocidas o potenciales en al menos un 50 % para 2030,	Especies	¿Qué especies exóticas tenemos? ¿Cuáles son sus impactos o posibles impactos futuros?
iii. erradicando o controlando las especies exóticas invasoras, en especial en lugares prioritarios, como las islas.	Lugares	¿Qué podemos hacer para eliminar, minimizar o mitigar su impacto? ¿Qué lugares son vulnerables a las introducciones?

Vías

Categorías de vías de introducción y orientaciones técnicas

- Marco adoptado por el CDB - proceso liderado por la UICN-ISSG a través de la Asociación Mundial de Información sobre EEI
- Orientaciones para la interpretación de las categorías de vías de introducción del CDB, desarrolladas para la Comisión Europea





4 Transport - Stowaway

Species introduced into natural environments as accidental stowaways or hitchhikers on a variety of vectors

Description

The **Transport - stowaway** category refers to the unintentional or accidental movement of live organisms as stowaway or hitchhikers, attached to a multitude of means of transport and associated equipment and media. The physical means of transport - stowaway include various transportation methods: ballast water and sediments, biofouling of ships, boats, offshore oil and gas platforms and other water vessels, dredging, angling or fishing equipment, civil aviation, sea, and air containers. Stowaways of any other vehicles and equipment for human activities, in military activities, emergency relief, aid and response, international development assistance, waste dispersal, recreational boating, tourism (e.g., tourists and their luggage) are also included under this pathway.

Similar or Related pathways

The **Transport - stowaway** and the **Transport - contaminant** pathways can be distinguished from the **Release in nature** or **Escape from confinement** categories by whether the taxa was unintentionally or accidentally transported to a new region (as in the case of **Transport - contaminant** and **Transport - stowaway**) or if the taxa was intentionally or deliberately introduced, either into the wild or in confinement (as in the case of **Release in nature** and **Escape from confinement**).

The **Transport - stowaway** category, and subcategories contained within, can be confused with the **Transport - contaminant** pathway and its sub-categories. However, as a rule of thumb, the easiest way to identify the correct category is to focus on the meaning of the terms 'stowaway' vs. 'contaminant'. A stowaway is a species that uses vectors to move between locations by chance or unknowingly; whereas a contaminant can be described as one with an association to a specific organisms or habitat. For instance an invertebrate species that lays eggs on certain plant species which are transported would be a contaminant of those plant species; however, if adults of the same invertebrate species happen to enter a cargo container and are transported within, then they are a stowaway.

Commercial ships and recreational boats can accidentally transport species as stowaways. © National Park Service CC BY-NC-ND 2.0

European Commission

	Categoría	Subcategoría
Desplazamientos de PRODUCTOS BÁSICOS	**LIBERACIÓN** EN LA NATURALEZA (1)	Control biológico
		Control de la erosión / estabilización de dunas (cortavientos, setos, ...)
		Pesca en la naturalezas (incluyendo la pesca recreativa)
		Caza
		"Mejora" de paisajes/flora/fauna en la naturaleza
		Introducción para fines de conservación o gestión de la vida silvestre
		Liberación en la naturaleza con fines de consumo (ajenos a los antedichos, por ejemplo, pieles, transporte, uso en medicina)
		Otras liberaciones intencionales
	FUGA DE CAUTIVIDAD (2)	Agricultura (incluyendo materias primas para biocombustible)
		Acuicultura / maricultura
		Jardín botánico/zoo/acuario (excluyendo los acuarios domésticos)
		Especies para mascota/acuario/terrario especies (incluyendo los alimentos vivos para tales especies)
		Animales de explotación (incluyendo los animales libres en condiciones restringidas)
		Silvicultura (incluyendo la forestación o reforestación)
		Explotación de animales para peletería
		Horticultura
		Fines ornamentales ajenos a la horticultura
		Investigación y reproducción animal *ex-situ* (en instalaciones)
		Alimentos vivos y carnada viva
		Otras fugas de cautividad
	CONTAMINANTES POR TRANSPORTE (3)	Material contaminante de vivero/criadero
		Carnada contaminada
		Contaminante de alimentos (incluyendo alimentos vivos)
		Contaminantes presentes en animales (salvo parásitos, especies transportadas por anfitrión/vector)
		Polizones presentes en animales (incluyendo especies transportadas por anfitrión y vector)
		Polizones presentes en plantas (salvo parásitos, especies transportadas por anfitrión/vector)
		Parásitos en plantas (incluyendo especies transportadas por anfitrión y vector)
		Contaminantes de semillas
		Comercio de maderas
		Transporte de materiales de hábitat (terrenos, vegetación,...)
VECTOR	**POLIZONES** POR TRANSPORTE (4)	Equipos de pesca/pesca recreativa
		Contenedor/granel
		Polizones dentro o fuera de la cabina de avión
		Polizones en buques/embarcaciones (excluyendo el agua de lastre y la incrustación de cascos)
		Maquinaria/equipos
		Personas y sus maletas/equipaje (especialmente turistas)
		Material orgánico de embalaje, especialmente maderas de embalaje
		Agua de lastre en buques/embarcaciones
		Incrustaciones en cascos de buques/embarcaciones
		Vehículos (coche, tren, ...)
		Otros medios de transporte
DISPERSIÓN	**PASILLO** (5)	Mares/cuencas/vías de navegación interconectados
		Túneles y puentes terrestres
	AUTÓNOMA (6)	Dispersión natural transfronteriza de especies exóticas invasoras introducidas por las vías 1 a 5

Vías

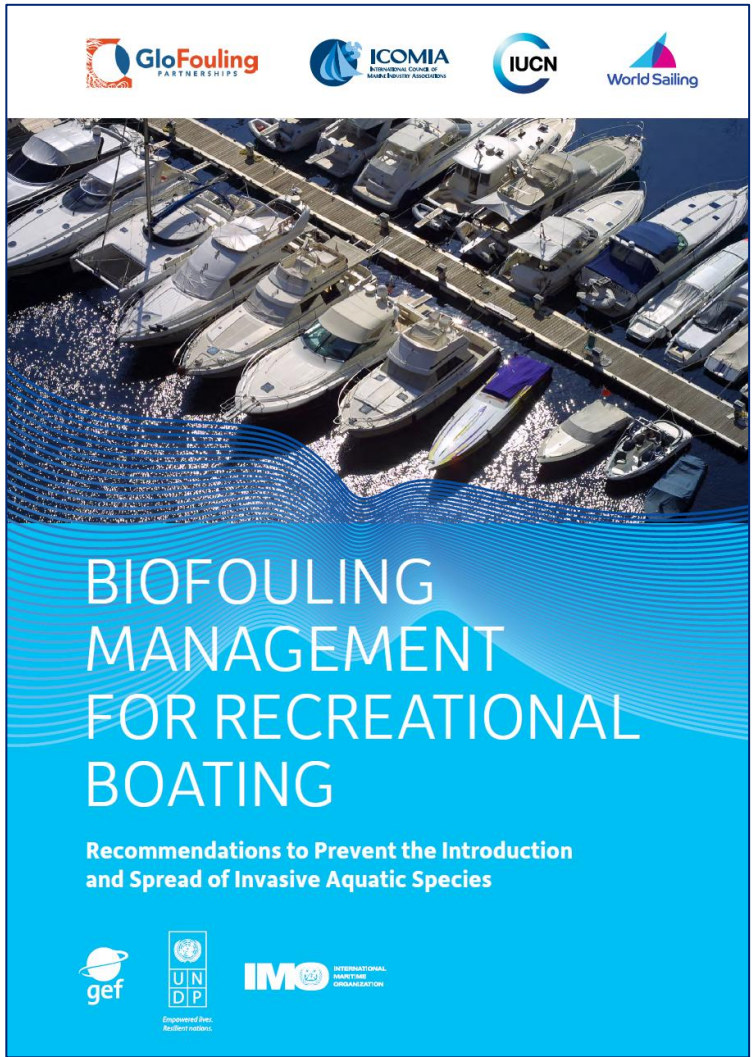
Gestión de las vías de introducción

Códigos de conducta

- Navegación recreativa
- Jardines botánicos
- Horticultura
- Caza
- Viajes internacionales
- Silvicultura de plantaciones
- Animales de compañía
- Pesca recreativa
- Zoológicos y acuarios

Vías

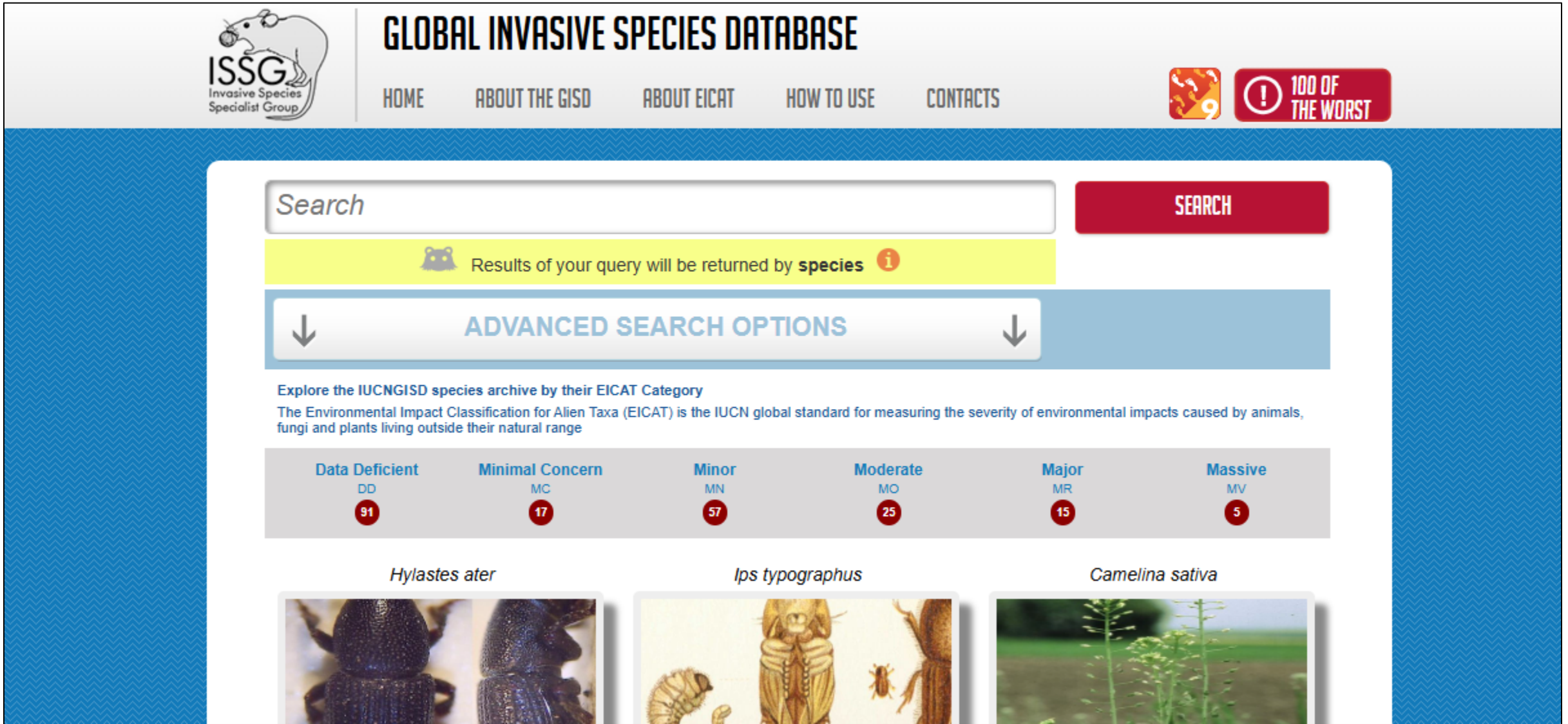
Gestión de las vías de introducción – gestión del incrustamiento en cascos de buques de la navegación recreativa



Vías y **Especies**

https://www.iucngisd.org/gisd/

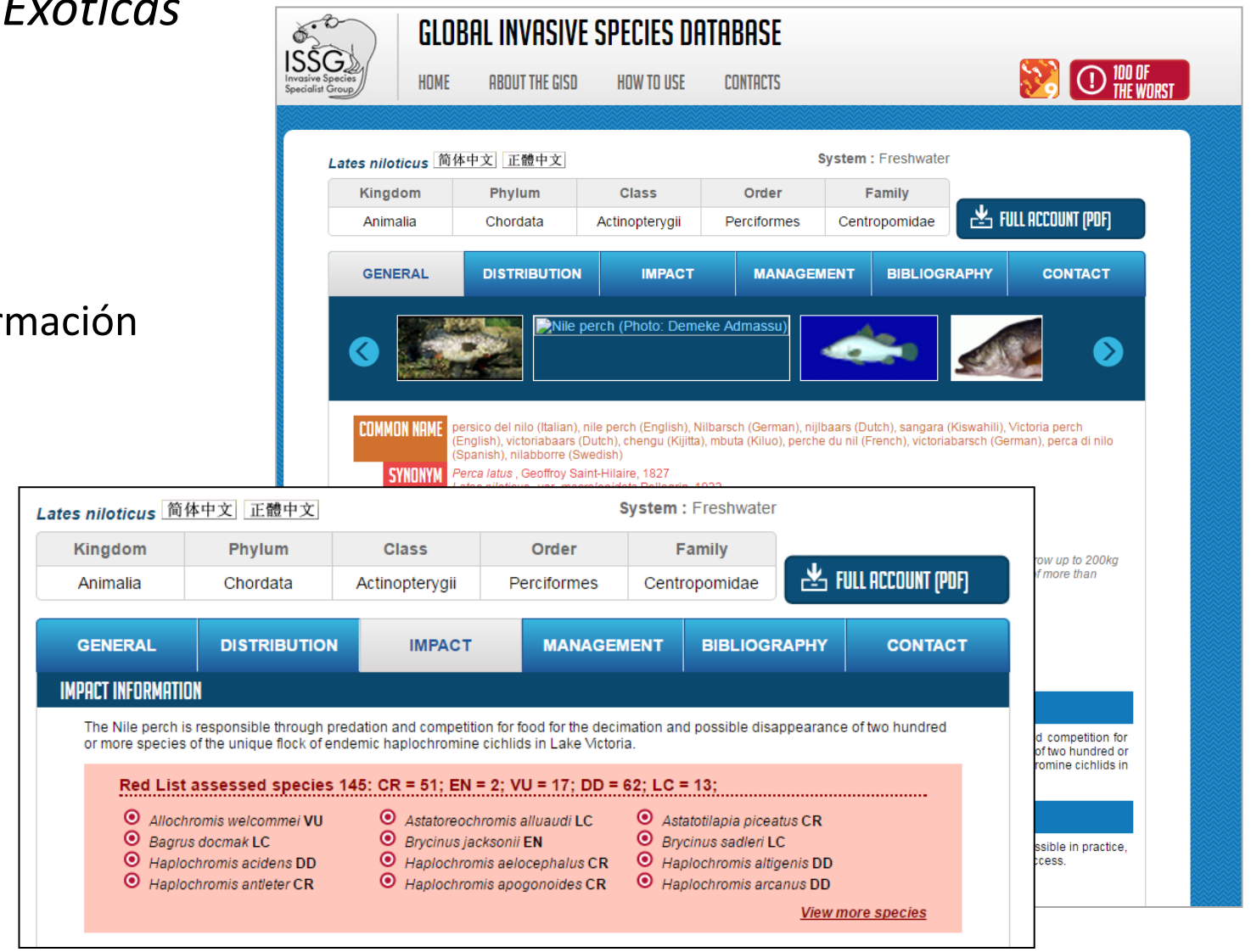
Base de Datos Mundial sobre Especies Exóticas Invasoras (GISD: siglas en ingles)



Vías y Especies

Base de Datos Mundial sobre Especies Exóticas Invasoras (GISD: siglas en ingles)

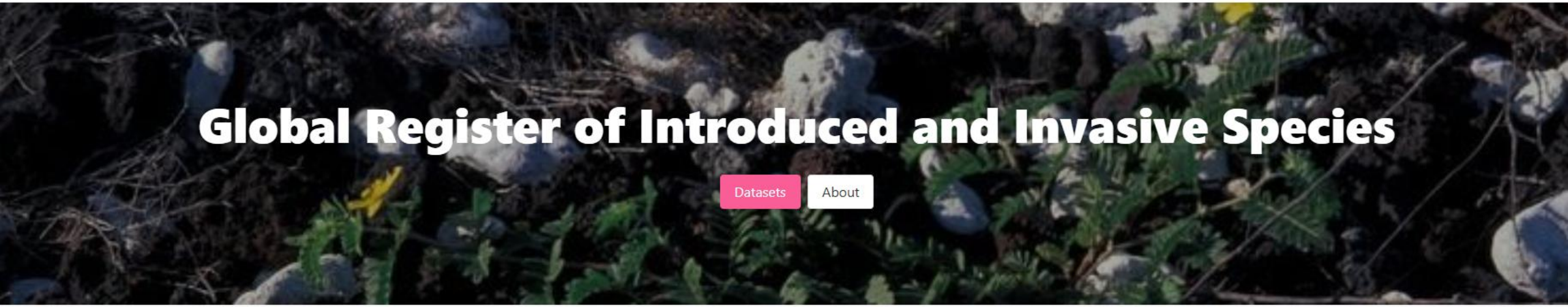
- Abarca todos los grupos taxonómicos, desde microorganismos hasta plantas y animales
- >1,000 fichas de especies, que incluyen información sobre:
  - Distribución
  - Vías de introducción
  - Impactos
  - Información de gestión
- Enlaces a la Lista Roja de la UICN



Especies

https://griis.org/

Registro Mundial de Especies Introducidas e Invasoras (GRIIS: siglas en ingles)



CONTACT US

Please direct all enquiries to:
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GIASIPartnership

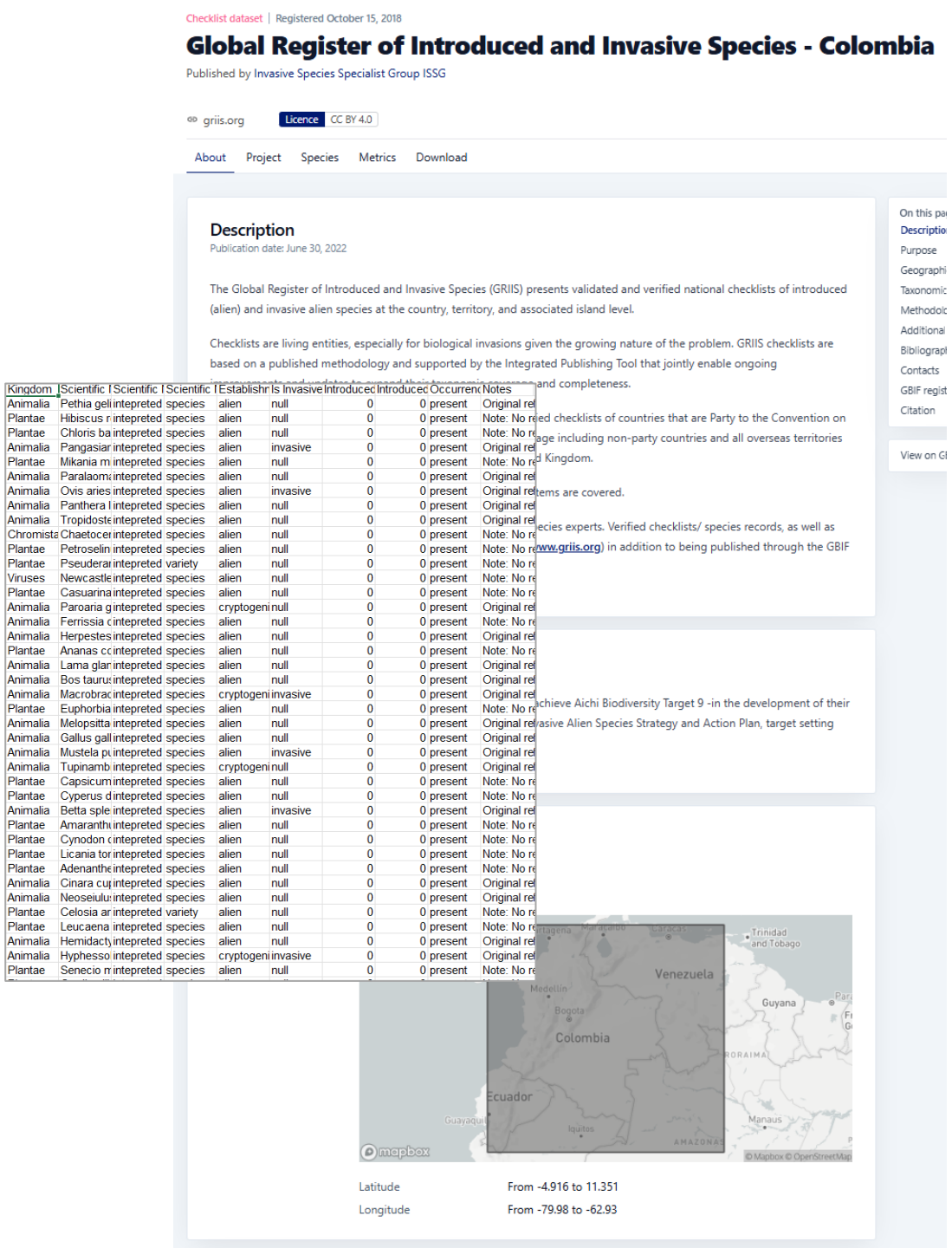
Developed within CBD Global Invasive Species Information Partnership (GIASIP)

Especies

Registro Mundial de Especies Introducidas e Invasoras (GRIIS: siglas en ingles)

- Listados nacionales y subnacionales validados y verificados de especies exóticas e invasoras
- Base para identificar las EEI presentes en un país
- Identificado como uno de los recursos clave para el desarrollo del indicador principal de la Meta 6:

“Tasa de establecimiento de especies exóticas invasoras”



Especies

Clasificación del Impacto Ambiental de Taxones Exóticos (EICAT: siglas en ingles)

- Sistema desarrollado por la UICN, a solicitud de la COP del CDB, *para clasificar las especies exóticas invasoras según la magnitud de sus impactos ambientales*

- Asigna las especies exóticas a categorías de impacto ambiental
  - Evaluando los impactos a través de 12 mecanismos de impacto

- Apoya la priorización de especies exóticas invasoras

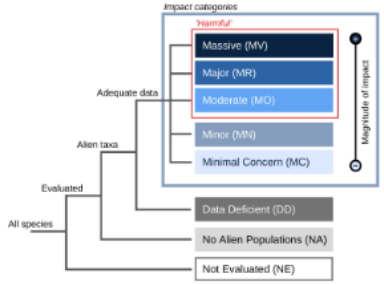
Especies

EICAT (ENVIRONMENTAL IMPACT CLASSIFICATION FOR ALIEN TAXA)

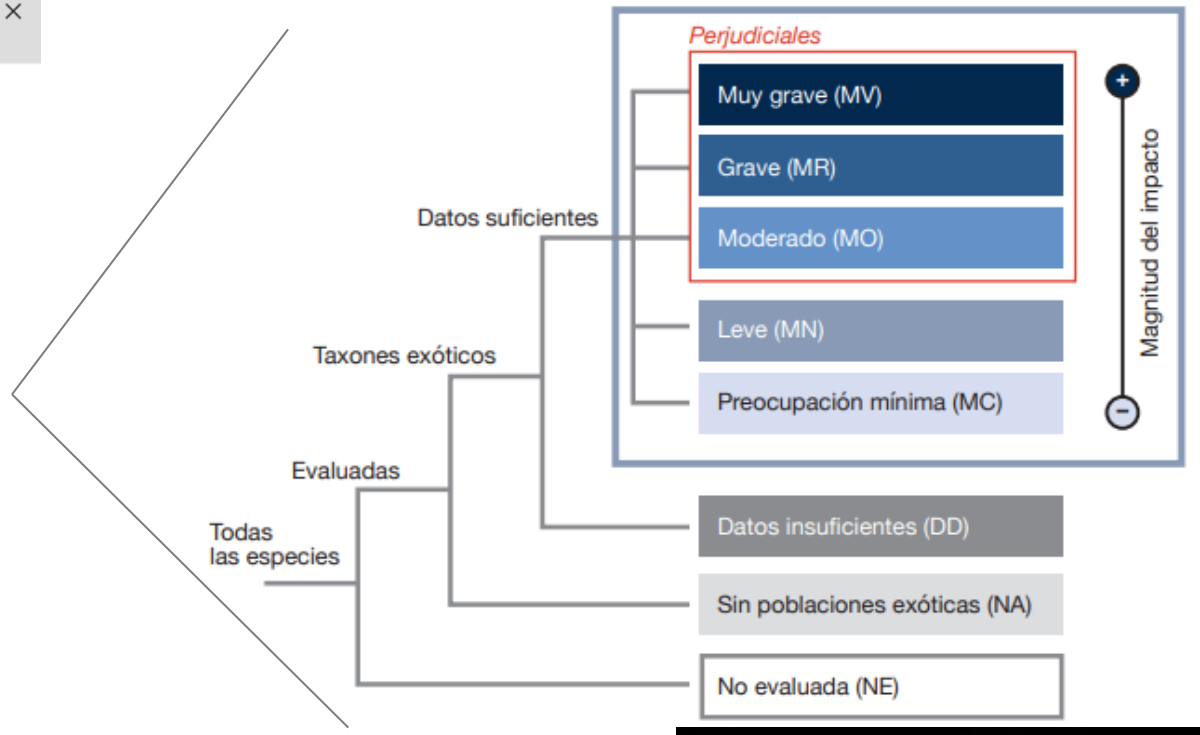
Not Evaluated	No Alien Population	Data Deficient	Minimal Concern	Minor	Moderate	**Major**	Massive
NE	NA	DD	MC	MN	MO	MR	MV

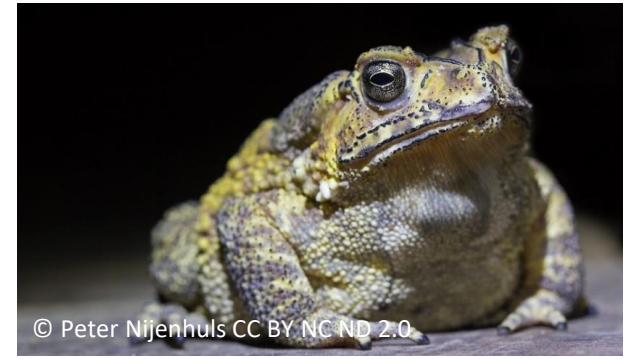
MR ***Duttaphrynus melanostictus***
Asian common toad

DATE ASSESSED	2020-11-06
YEAR PUBLISHED	2021
EICAT CATEGORY	MR (Major)
JUSTIFICATION FOR EICAT ASSESSMENT	Populations of Ingerophrynus biporcatus have been dispaced and potententially eliminated in certain areas by Duttaphrynus melanostictus in Bali (Church 1960).
CONFIDENCE RATING	Low
MECHANISM(S) OF MAXIMUM IMPACT	Competition
COUNTRIES OF MOST SEVERE IMPACT	Indonesia
DESCRIPTION OF IMPACTS	Competition - Duttaphrynus melanostictus displaced the native Ingerophrynus biporcatusin Bali, Indonesia through competition for habitat. Poisoning/toxicity - Due to its toxicity, the presence of Duttaphrynus melanostictus in Timor-Leste has been associated with the decline of native Trimesurus insularis, Varanus glauerti as well as native quail species.
ASSESSOR	Sabrina Kumschick; Giovanni Vimercati; Carla Wagener
CONTRIBUTORS	Khensani Nkuna; Nitya Prakash Mohanty; F. André de Villiers; Sarah J. Davies; Alexander D. Rebelo; Corey Thorp; James Baxter-Gilbert; Mohlamatsane Mokhatla; John Measey
REVIEWERS	EICAT authority
RECOMMENDED CITATION	Sabrina Kumschick, Giovanni Vimercati, Carla Wagener (2022). *Duttaphrynus melanostictus*. IUCN Environmental Impact Classification for Alien Taxa (EICAT).



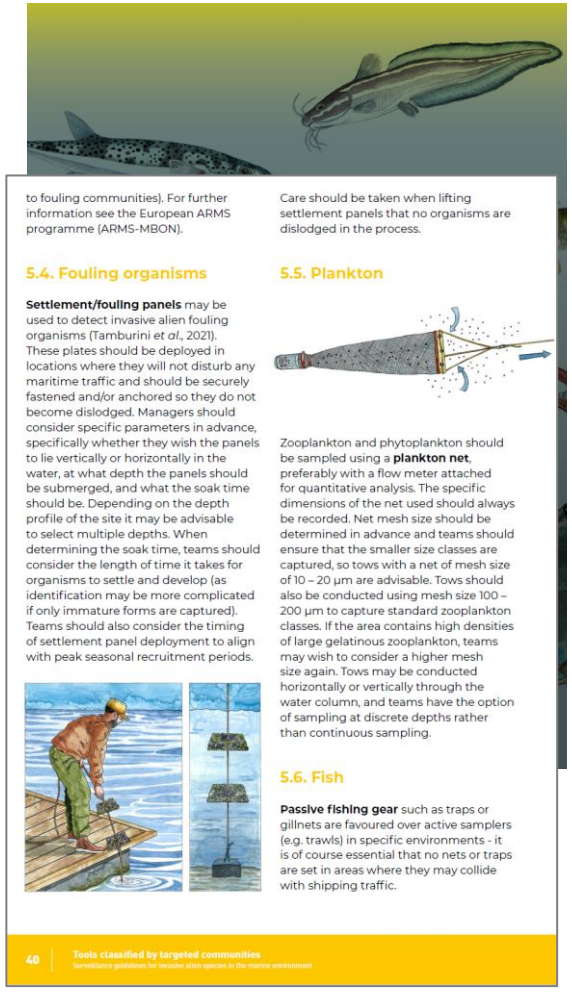
DOWNLOAD DETAILS DOWNLOAD SUMMARY





Especies

Vigilancia



to fouling communities). For further information see the European ARMS programme (ARMS-MBON).

5.4. Fouling organisms

Settlement/fouling panels may be used to detect invasive alien fouling organisms (Tamburini *et al.*, 2021). These plates should be deployed in locations where they will not disturb any maritime traffic and should be securely fastened and/or anchored so they do not become dislodged. Managers should consider specific parameters in advance, specifically whether they wish the panels to lie vertically or horizontally in the water, at what depth the panels should be submerged, and what the soak time should be. Depending on the depth profile of the site it may be advisable to select multiple depths. When determining the soak time, teams should consider the length of time it takes for organisms to settle and develop (as identification may be more complicated if only immature forms are captured). Teams should also consider the timing of settlement panel deployment to align with peak seasonal recruitment periods.

Care should be taken when lifting settlement panels that no organisms are dislodged in the process.

5.5. Plankton

Zooplankton and phytoplankton should be sampled using a **plankton net**, preferably with a flow meter attached for quantitative analysis. The specific dimensions of the net used should always be recorded. Net mesh size should be determined in advance and teams should ensure that the smaller size classes are captured, so tows with a net of mesh size of 10 – 20 µm are advisable. Tows should also be conducted using mesh size 100 – 200 µm to capture standard zooplankton classes. If the area contains high densities of large gelatinous zooplankton, teams may wish to consider a higher mesh size again. Tows may be conducted horizontally or vertically through the water column, and teams have the option of sampling at discrete depths rather than continuous sampling.

5.6. Fish

Passive fishing gear such as traps or gillnets are favoured over active samplers (e.g. trawls) in specific environments - it is of course essential that no nets or traps are set in areas where they may collide with shipping traffic.

2.9. Camera traps and drones

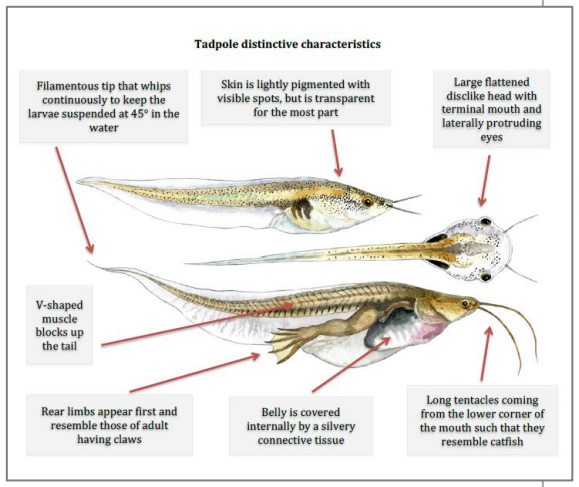
Camera traps are tools that combine digital cameras with motion sensors to automatically take pictures of wildlife passing within their field of vision, and as such, there is little or no human interference. They can be set in the field for extended periods of time, recording images onto a hard drive for later examination. Depending on the model, camera traps can be set to take still images or short videos. Some models can send images over the internet to provide real-time information on animal presence, whilst others can take enhanced images (infrared night vision) to identify activity in the dark, although there is a risk that some animals can detect sounds from cameras which can introduce biases into their use.

The use of cameras can raise issues related to privacy, as they can in theory record images of people without their consent and as such, permissions may be required for their use. As they are left in place for extended periods of time, disturbance and theft can be significant issues in some areas. In Sweden, Dahl & Ahlén (2017) estimated that 10-30% of cameras will have to be replaced each year due to failures or theft.

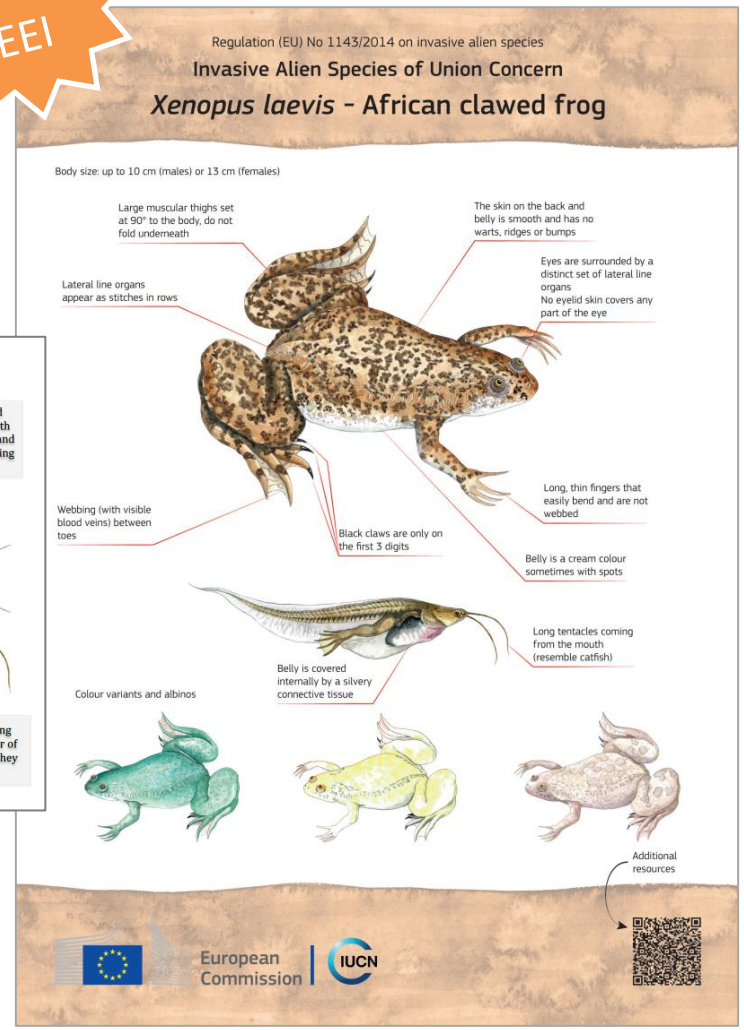
Cameras can be set for specific surveys, or to contribute to citizen science initiatives. For example, MammalNet (Hsing et al., 2022) is a partnership between different scientific and academic institutions in Europe and citizen scientists using tools such as camera traps to monitor wild mammals across Europe. The first phase of the project focused on Croatia, Germany, Poland and Spain, but projects and partners are already being incorporated in new countries, including Italy, Hungary, Ireland, Portugal and the Balkan countries. Camera traps set for general monitoring purposes have provided the first records of a number of IAS, including the raccoon in Northern England, and the first record of chital in Brazil (Foster et al., 2021). Cameras operated by hunters in Scandinavia provide a major source of raccoon dog reports (Dahl & Ahlén, 2017).

Camera traps can also be used to support more targeted surveillance of particular IAS, for example to assess the presence / absence of a recently established species. By placing a network of cameras in suitable habitats, the distribution and spread can be assessed to help guide management. The effectiveness of camera traps for this

Drone used for remote sensing of vegetation © Jan Pergl

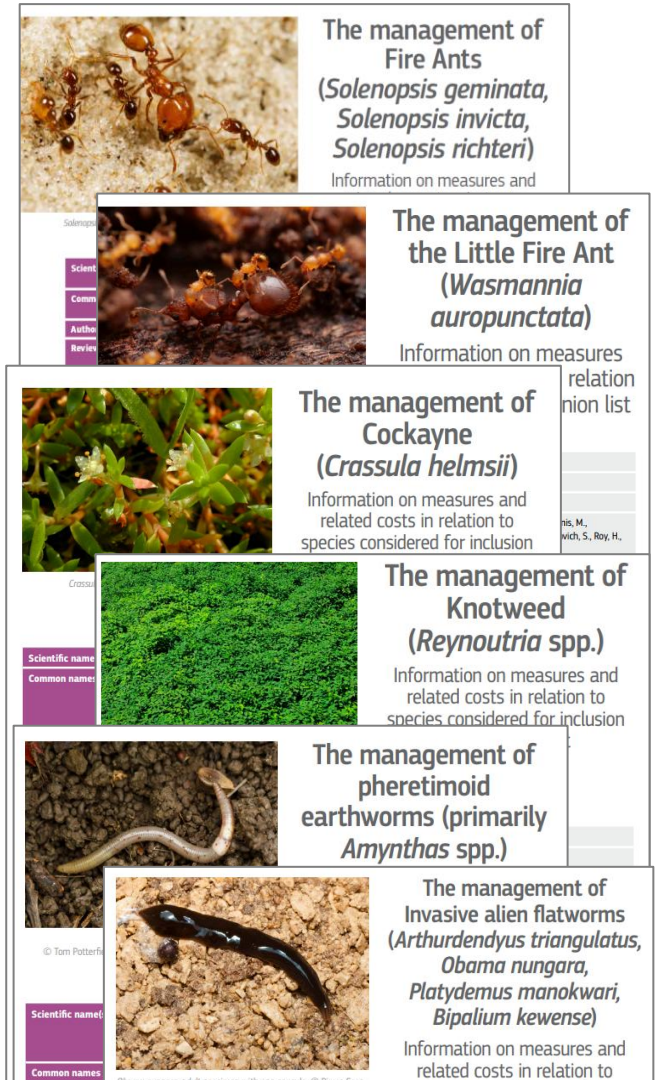


17 EEI

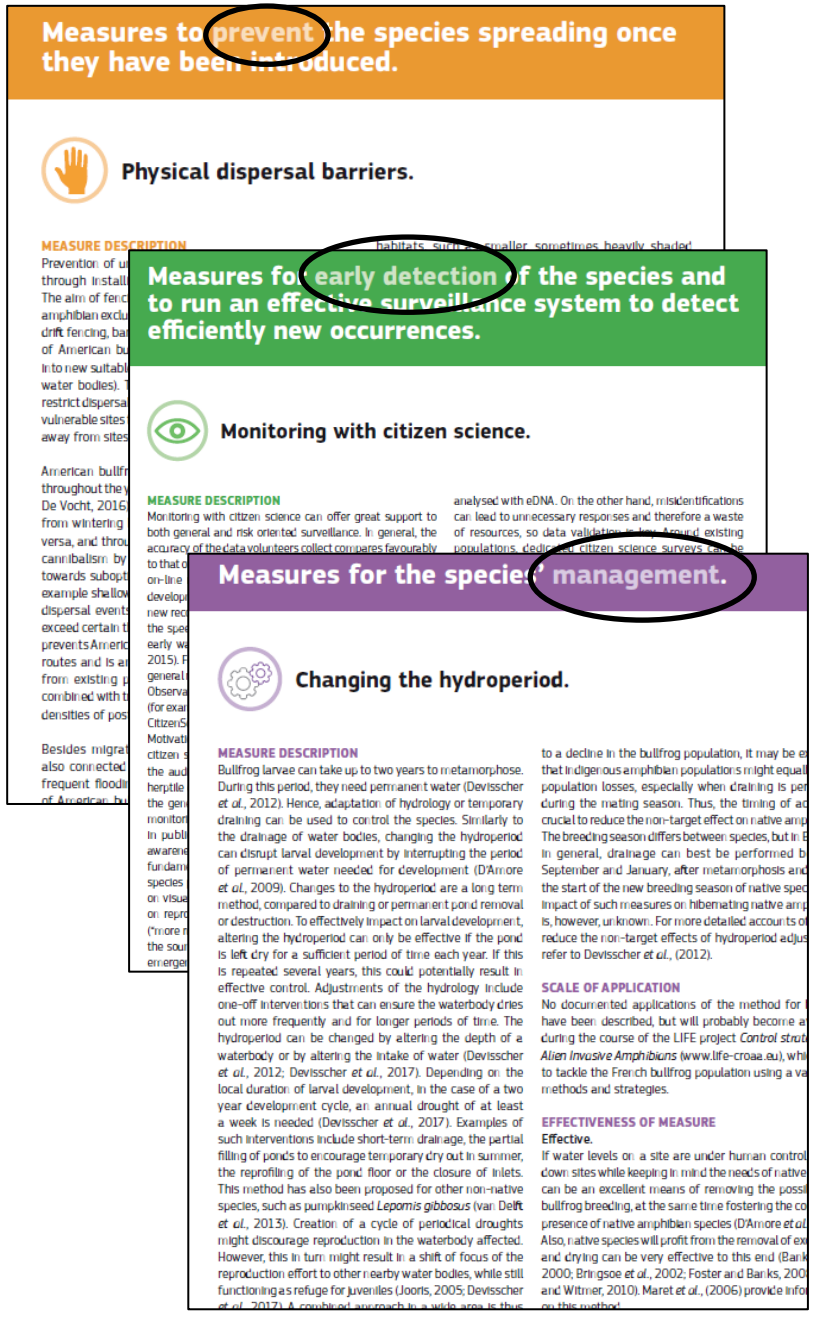


Especies

Gestión



>100 EEI

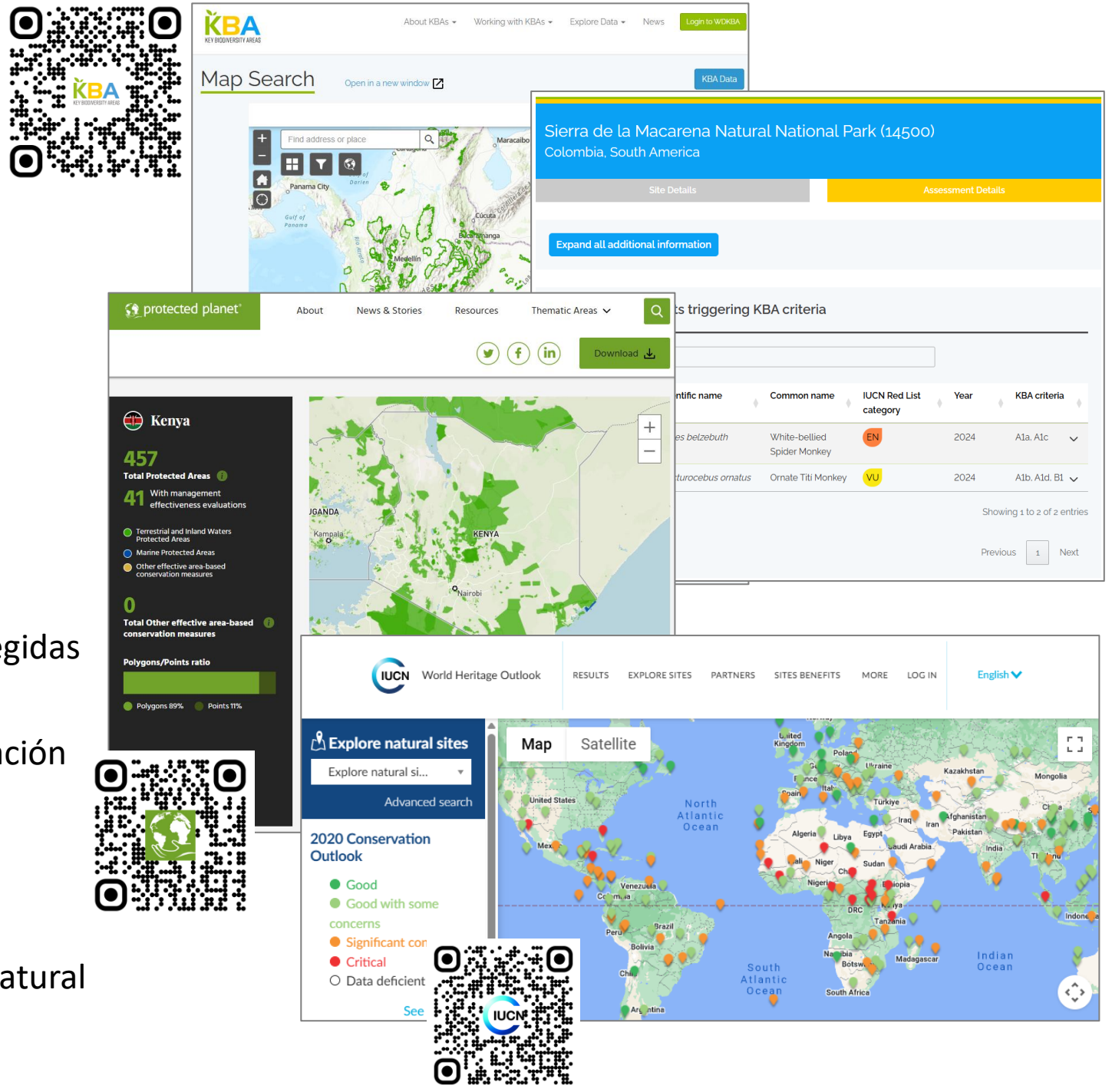


Especies

Gestión

Lugares

- Áreas Clave para la Biodiversidad (KBA)
  - Norma de la UICN para identificar sitios importantes para las especies y sus hábitats
  - Más de 16 500 sitios identificados
  - Enfoque colaborativo - BirdLife International organismo anfitrión
- Protected Planet
  - Base de datos mundial de áreas naturales protegidas
  - 303 309 áreas protegidas registradas
  - Plataforma desarrollada mediante una colaboración entre UNEP-WCMC y la UICN
- UICN World Heritage Outlook
  - 271 sitios del Patrimonio Mundial de carácter natural



Ilustraciones de uso libre de numerosas especies exóticas invasoras

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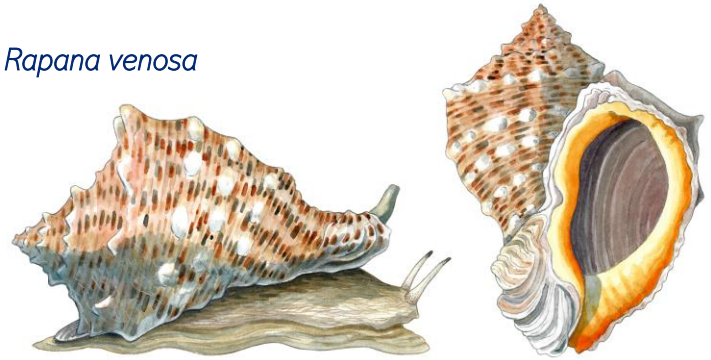
Rapana venosa



Pennisetum setaceum

Procambarus clarkii

IUCN

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HOME / OUR WORK / INVASIVE ALIEN SPECIES SHARE:

Invasive Alien Species

Preventing the introduction of invasive alien species and managing their impacts is essential to halting biodiversity loss. This issue is also critical to human health, food security, livelihoods and economies.

STORY
12 NOV, 2025

Supporting the successful implementation of the EU Invasive Alien Species...

IUCN provides technical and scientific support to the European Commission for implementing Regulation (EU) No 1143/2014 on Invasive Alien Species (IAS). Each year, this collaboration delivers applied…

NEWS
30 SEP, 2025

IUCN launches consultation on developing a strategy for invasive alien species

The IUCN is pleased to announce the launch of a wide-ranging consultation aimed at gathering feedback from its constituents and beyond on the need for an IUCN strategy focused on invasive alien…

NEWS
10 JUN, 2025

IUCN launches new call for proposals to address Invasive Alien Species in...

The International Union for Conservation of Nature (IUCN) is pleased to announce the opening of a call for proposals under its European Invasive Alien Species Rapid-Response Fund.

Cortaderia jubata © European Commission, Artist: Massimiliano Lipperi

https://www.iucn.org/our-work/topic/invasive-alien-species

GRACIAS!