



**Mediterranean
Action Plan
Barcelona
Convention**

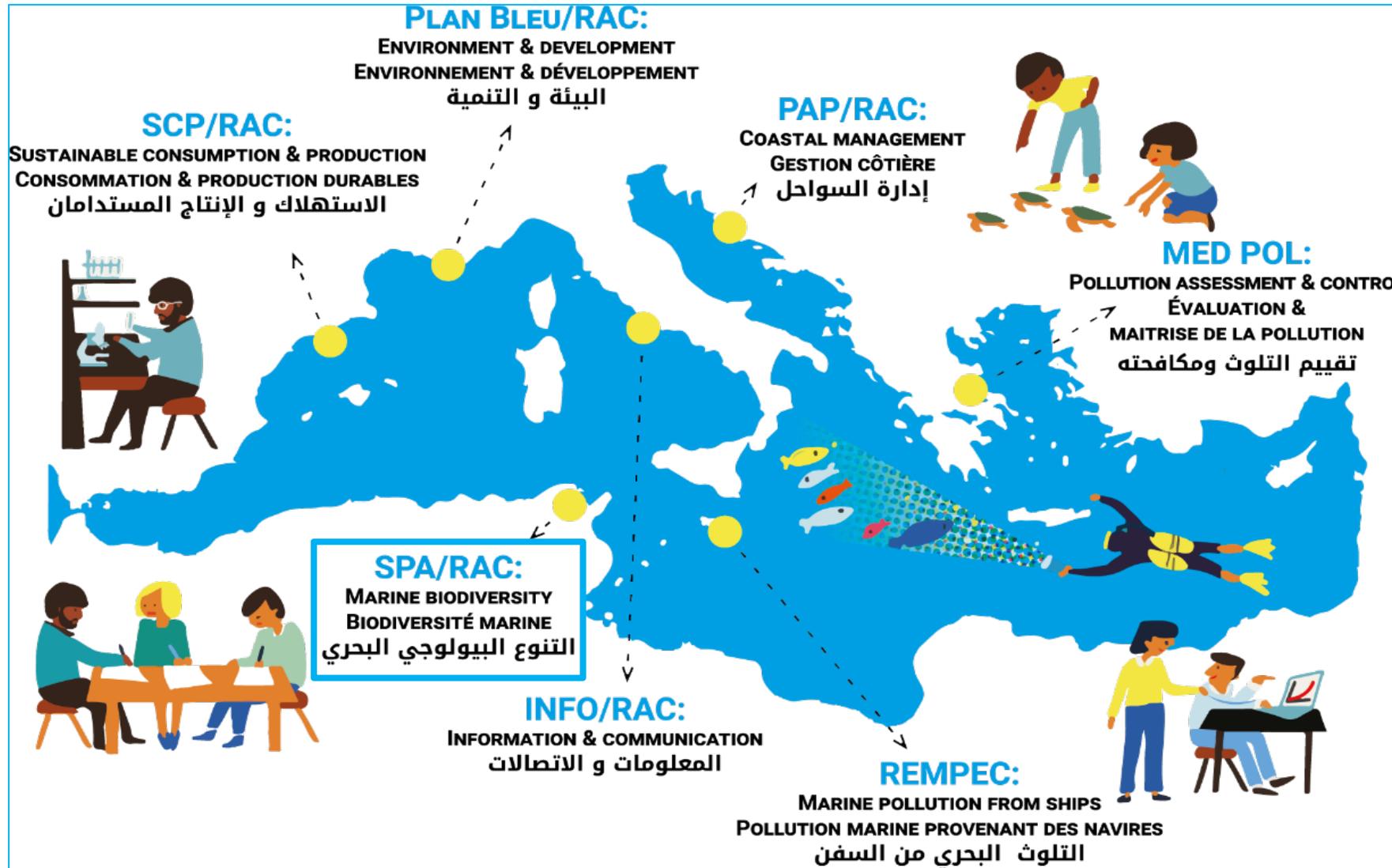


*The Mediterranean
Biodiversity
Centre*

The non-indigenous species & the Barcelona Convention

Atef OUERGHI, Programme Officer - Ecosystem Conservation, Mediterranean Biodiversity Centre

MAP System



SPA/RAC

The Marine Biodiversity Centre At The Service Of The Mediterranean Countries

MARINE PROTECTED AREAS & BIODIVERSITY

The Specially Protected Areas Regional Activity Centre, SPA/RAC, is created in 1985 to assist Contracting Parties to the Barcelona Convention in the implementation of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol).

1

Inventory and mapping

With the aim to identify species and sites of conservation interest.

2

Developing research

To complete knowledge and fill in gaps on biodiversity.

3

Conservation programmes coordination

At regional level, to mitigate threats on biodiversity components, while taking into account the Ecosystem Approach principles.

4

Monitoring & assessment

Of the marine biodiversity status, within the Integrated Monitoring and Assessment Programme (IMAP).

5

MPAs & SPAMI development

Creation and enforcement towards a coherent network.

6

Capacity building

To strength skills for biodiversity monitoring & MPAs management.

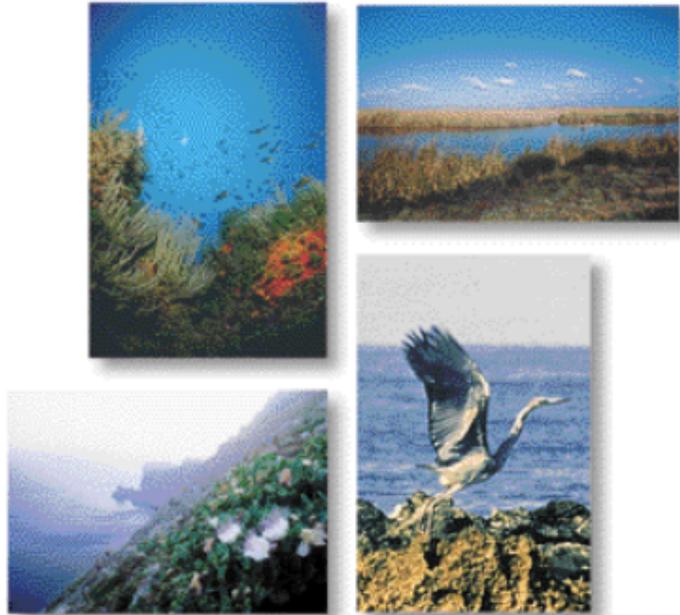
7

Information, outreach and education

On biodiversity and MPAs issues.



PROTOCOL CONCERNING SPECIALLY PROTECTED AREAS AND BIOLOGICAL DIVERSITY IN THE MEDITERRANEAN



United Nations Environment Programme
Mediterranean Action Plan



Article 13

INTRODUCTION OF NON-INDIGENOUS OR GENETICALLY MODIFIED SPECIES

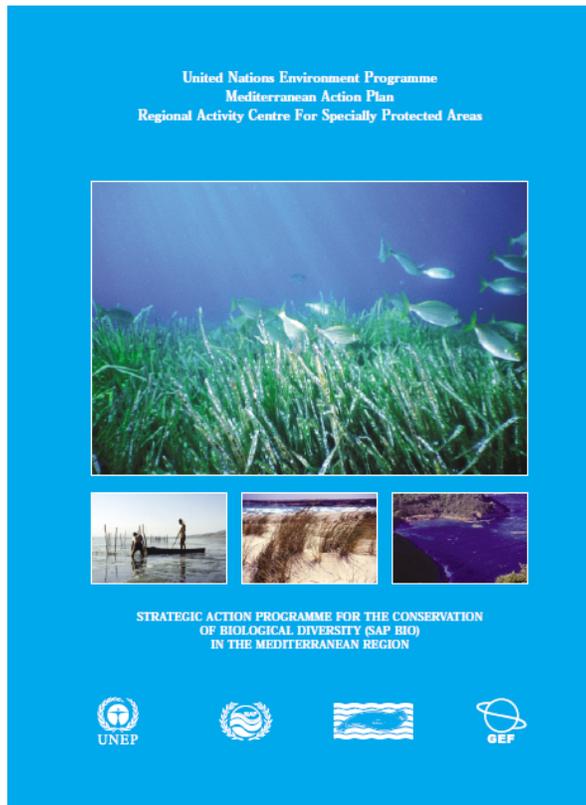
1. The Parties shall take all appropriate measures to regulate the intentional or accidental introduction of non-indigenous or genetically modified species to the wild and prohibit those that may have harmful impacts on the ecosystems, habitats or species in the area to which this Protocol applies.
2. The Parties shall endeavour to implement all possible measures to eradicate species that have already been introduced when, after scientific assessment, it appears that such species cause or are likely to cause damage to ecosystems, habitats or species in the area to which this Protocol applies.

SAP/BIO : Strategic Action Programme for the conservation of Biological Diversity in the Mediterranean Region

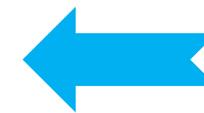
PAS BIO 2003

→ Main threats affecting Mediterranean marine and coastal biodiversity →

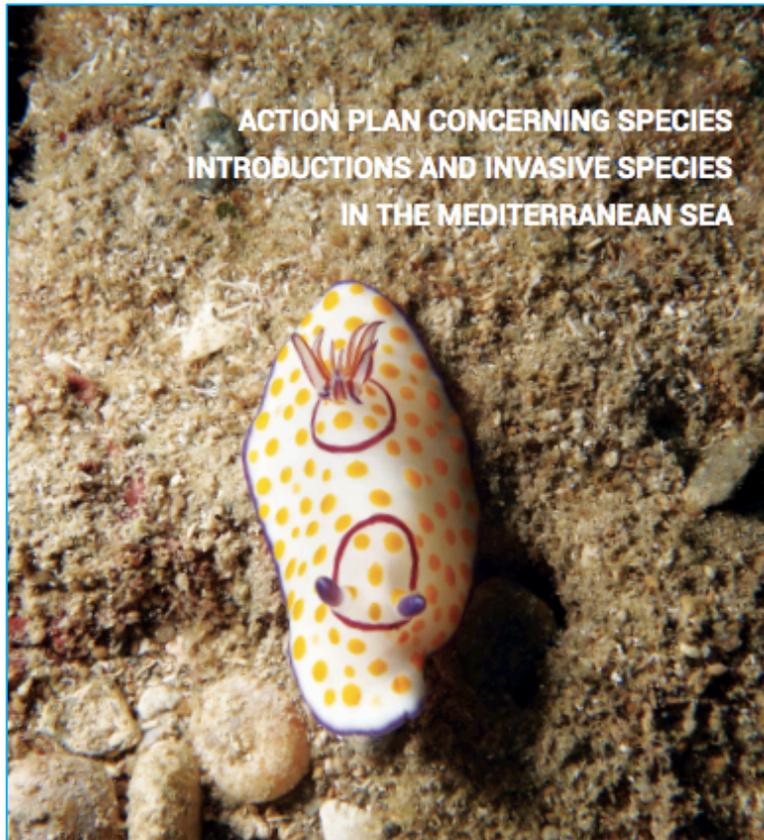
15) Control and mitigate the introduction and spread of alien and invasive species (high, first priority rank)



Post-2020 SAPBIO



Action Plan concerning species introduction and invasive species



Regional Strategy outlines objectives, priorities, and implementation measures in different fields as well as their coordination

Action Plan concerning species introduction and invasive species (updated in 2016)

A. OBJECTIVES OF THE ACTION PLAN

14. The main objective of the present Action Plan is to promote the development of coordinated efforts and management measures throughout the Mediterranean region in order to prevent as appropriate, minimize and limit, monitor, and control marine biological invasions and their impacts on biodiversity, human health, and ecosystem services, particularly by:
 1. strengthening the capacity of the Mediterranean countries to deal with the issue of alien species, within the framework of the EcAp;
 2. supporting a regional information network for the efficient exploitation of alien species data and to support the regional policies on biological invasions;
 3. further developing MAMIAS, an online platform for the collection, exploitation, and dissemination of information on marine biological invasions in the Mediterranean Sea to support relevant regional and international policies;
 4. strengthening the institutional and legislative frameworks at the level of the countries of the region;
 5. conducting baseline studies and establishing monitoring programmes, within the framework of the EcAp Integrated Monitoring and Assessment Programme, to collect reliable and pertinent scientific data that can be used for decision-making where necessary;
 6. setting up mechanisms for cooperation and the exchange of information among the Mediterranean countries;
 7. Elaborating guidelines and any other technical documentation.



The Ecosystem Approach in the Mediterranean

How EU Member States develop marine strategies



Assess



Define ideal
environmental
state of seas



Set
targets



Monitor



Identify and
implement
actions
needed

CLEAN, HEALTHY AND PRODUCTIVE SEAS



IMPLEMENTATION OF THE ECOSYSTEM APPROACH IN THE MEDITERRANEAN

For A Healthy Mediterranean With Marine And Biological
Ecosystems That Are Productive And Biologically Diverse
For The Benefit Of Present And Future Generations



PROGRAMME DE SURVEILLANCE ET D'ÉVALUATION INTÉGRÉES DE LA MER ET DES CÔTES MÉDITERRANÉENNES ET CRITÈRES D'ÉVALUATION CONNEXES



44. The common indicator in relation to NIS is:

COMMON INDICATOR 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species, particularly invasive, non-indigenous species, notably in risk areas (EO2, in relation to the main vectors and pathways of spreading of such species in the water column and seabed, as appropriate):

45. Non-indigenous species monitoring in the Mediterranean is a trend monitoring, where it is key to establish reliable, long-term data-sets as a first step of monitoring.

46. In addition, monitoring of non-indigenous species (NIS), following the risk based approach, needs to be focused on the invasive alien species (IAS) in IAS introduction "hot spots" (e.g. ports and their surrounding areas, docks, marinas, aquaculture installations, heated power plant effluents sites, offshore structures). In addition, areas of special interest such as marine protected areas or lagoons may be selected on a case by case basis, as appropriate, depending on the proximity to alien species introduction hot spots.

50. As the most effective monitoring method a Rapid Assessment Survey (RAS) will be carried out, at least yearly by the Contracting Parties in hot-spot areas (e.g. ports and their surrounding areas, docks, marinas, aquaculture installations, heated power plant effluents sites, offshore structures).

51. In addition, UNEP/IMAP will develop during the initial phase of IMAP citizen survey guidance for NIS, to enable Contracting Parties to use this additional cost-efficient methodology, which also strengthens public awareness and participation.



IMAP:

Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and Related Assessment Criteria



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48. Based on existing regional databases, such as the Marine Mediterranean Invasive Alien Species database, (MAMIAS), the “Andromeda” invasive species database for the Mediterranean and Black Sea, and the European Alien Species Information Network (EASIN), each Contracting Party will determine the list of IAS to be monitored in its national monitoring programme during the initial phase of the IMAP and start collecting data regarding these species. Guidance on developing IAS national lists and a regional and or sub regional reference list will be developed by 2017.



UNITED
NATIONS

EP

UNEP(DEP1)/MED WG.431/Inf.14



UNEP

UNITED NATIONS
ENVIRONMENT PROGRAMME
MEDITERRANEAN ACTION PLAN

7 April 2017
Original: English

Thirteenth Meeting of Focal Points for Specially Protected Areas
Alexandria, Egypt, 9-12 May 2017

Agenda item 9: Assistance in the implementation of the first phase of the Integrated Monitoring and Assessment Programme (IMAP) on biodiversity and non-indigenous species in the framework of the EcAp roadmap

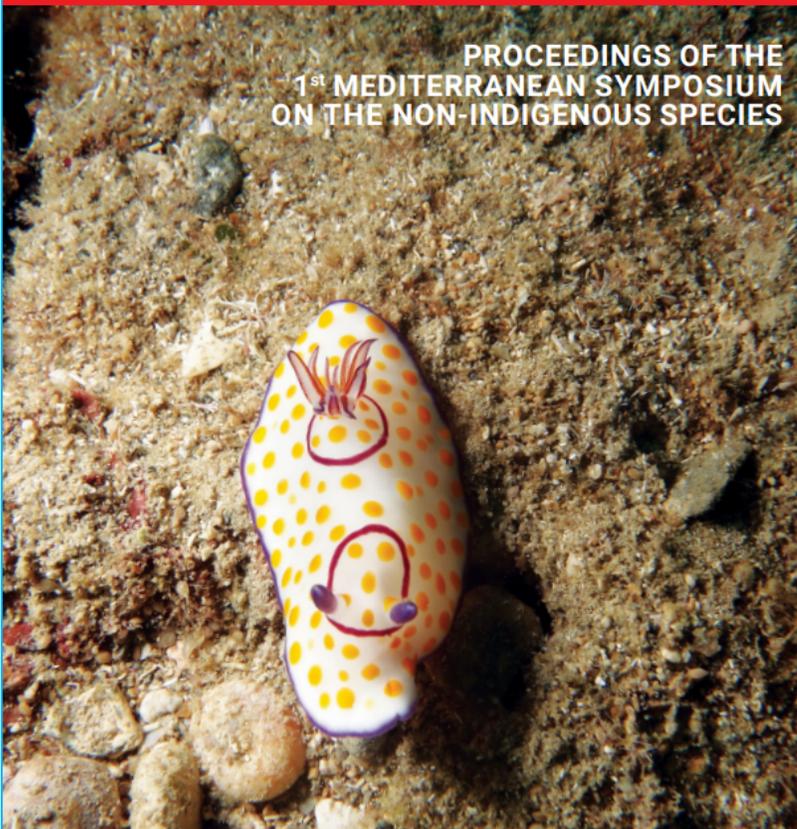
Guidance on developing invasive alien species national and sub-regional lists

For environmental and economy reasons, this document is printed in a limited number and will not be distributed at the meeting. Delegates are kindly requested to bring their copies to meetings and not to request additional copies.

Implementation measures (1)



PROCEEDINGS OF THE 1st MEDITERRANEAN SYMPOSIUM ON THE NON-INDIGENOUS SPECIES

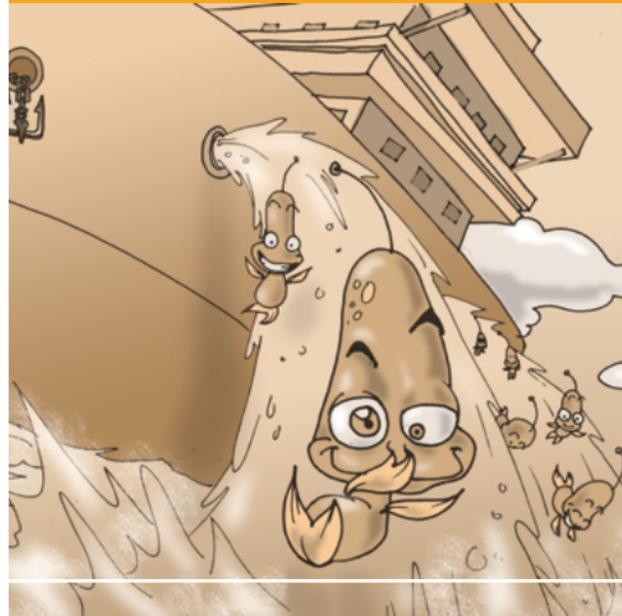


ANTALYA, TURKEY, 17-18 JANUARY 2019



GUIDELINES FOR CONTROLLING THE VECTORS OF INTRODUCTION INTO THE MEDITERRANEAN OF NON-INDIGENOUS SPECIES AND INVASIVE MARINE SPECIES

LIGNES DIRECTRICES POUR LE CONTRÔLE DES VECTEURS D'INTRODUCTION D'ESPÈCES NON-INDIGÈNES ET DES ESPÈCES ENVAHISSANTES MARINES EN MÉDITERRANÉE



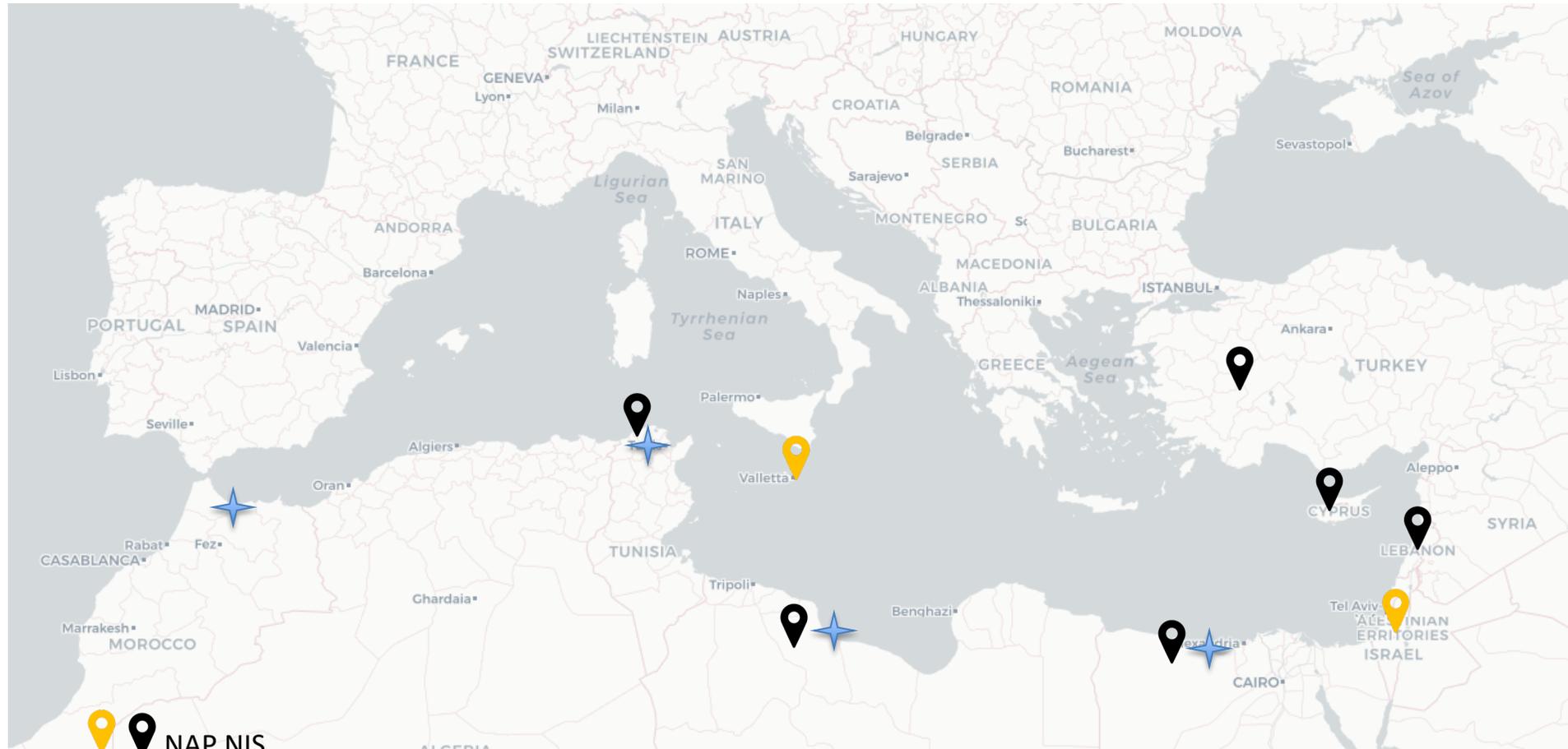
GUIDE FOR RISK ANALYSIS ASSESSING THE IMPACTS OF THE INTRODUCTION OF NON-INDIGENOUS SPECIES

GUIDE POUR L'ANALYSE DES RISQUES ET L'EVALUATION DES IMPACTS DES INTRODUCTIONS D'ESPÈCES NON-INDIGÈNES

ARRIVAL
Mediterranean
Sea



Implementation measures (2)



Map Source : <http://data.medchm.net>

MARine MEDITERRANEAN non-indigenous and INVAsive Species Database (MAMIAS)



Mediterranean Action Plan
Barcelona Convention



Home
About MAMIAS
MAMIAS Services
NIS News
Contact Us

NIS VALIDATED IN THE CATALOGUE

1568

Version 1.0 - last update : 21/04/2020

NIS VALIDATED IN MAMIAS

1199

Version 1.0 - last update : 21/04/2020

NATIONAL OCCURENCES

3903

GEOREFERENCED OCCURENCES

36

Number of Reported Marine NIS by Country

Numbers of new reported marine non-indigenous species

MAMIAS is EASIN Data Patners

2016

Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and related Assessment Criteria (IMAP)

2016

Mediterranean 2017 Quality Status Report

2017

www.mamias.org

Marine Mediterranean non-indigenous and InvAsive Species Database (MAMIAS)



MAMIAS Catalogue

Protocol for the
correction of spelling
errors

Checking synonyms

Checking autonyms



Catalogue of Life

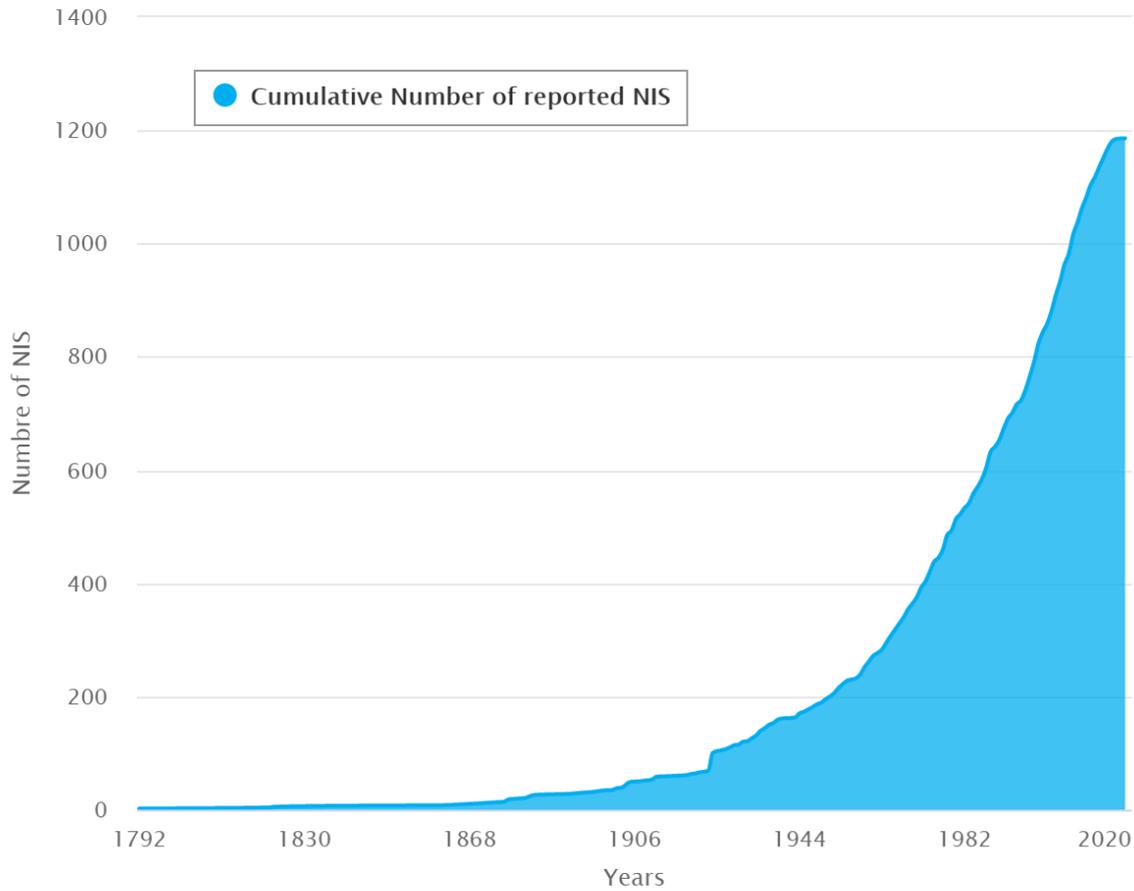


GBIF

Global Biodiversity
Information Facility

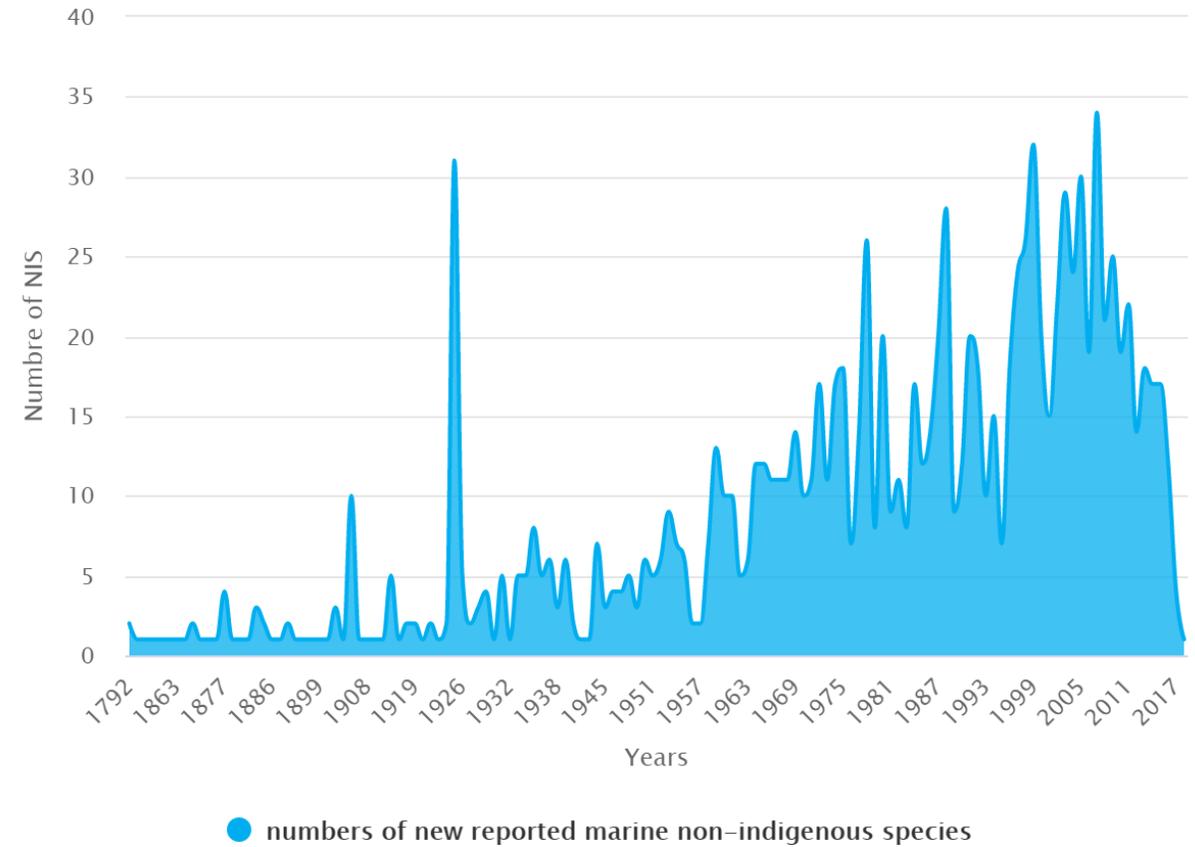
MArine Mediterranean non-indigenous and InvAsive Species Database (MAMIAS)

Numbers of new reported marine non-indigenous species



www.mamias.org

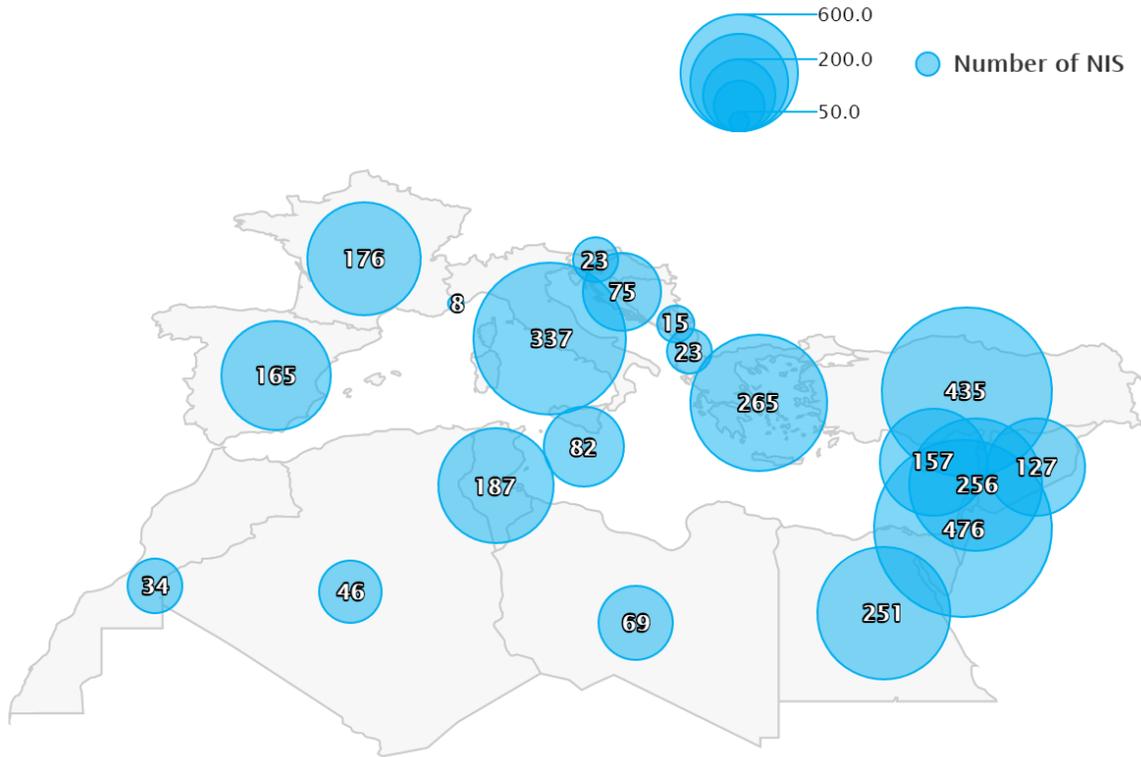
Temporal variability in numbers of new reported marine non-indigenous species



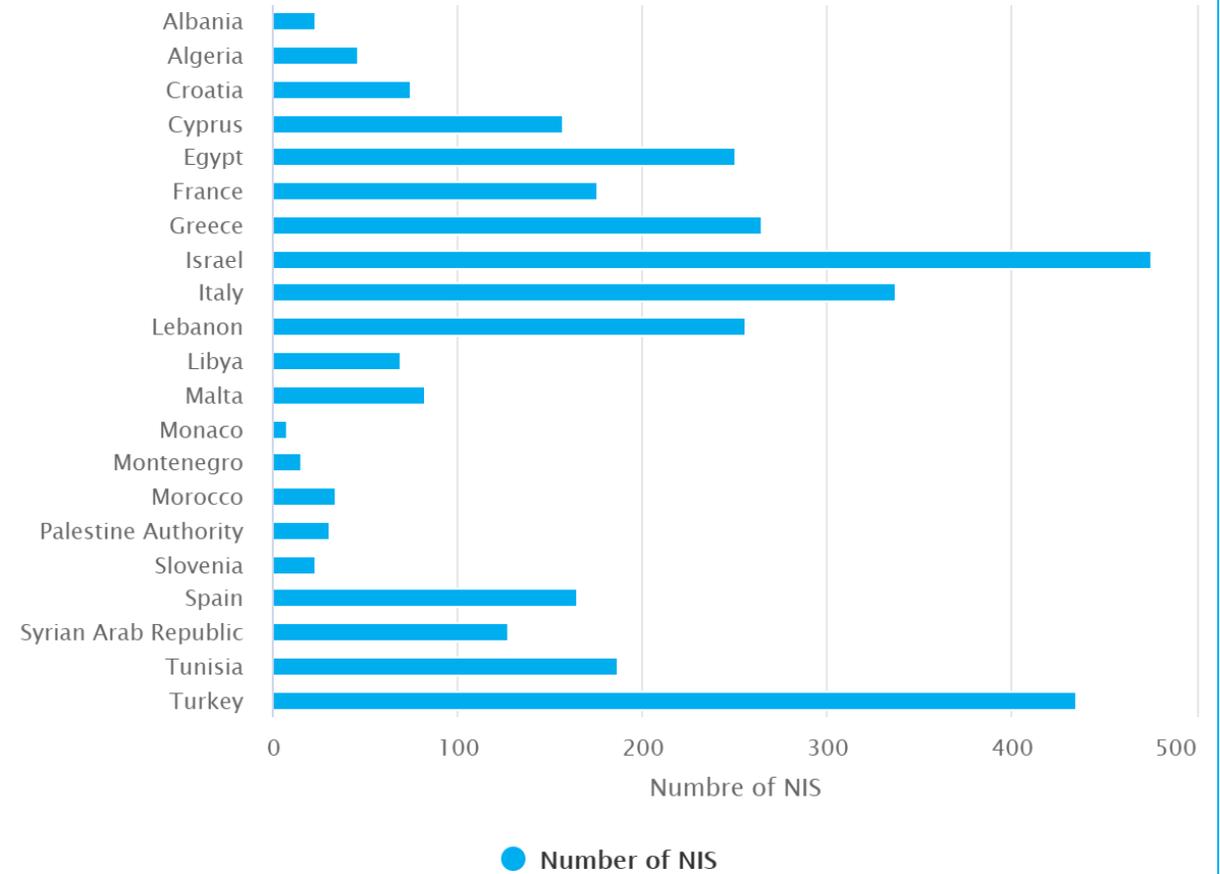
www.mamias.org

MArine Mediterranean non-indigenous and InvAsive Species Database (MAMIAS)

Number of Reported Marine NIS by Country



Number of reported NIS per Country



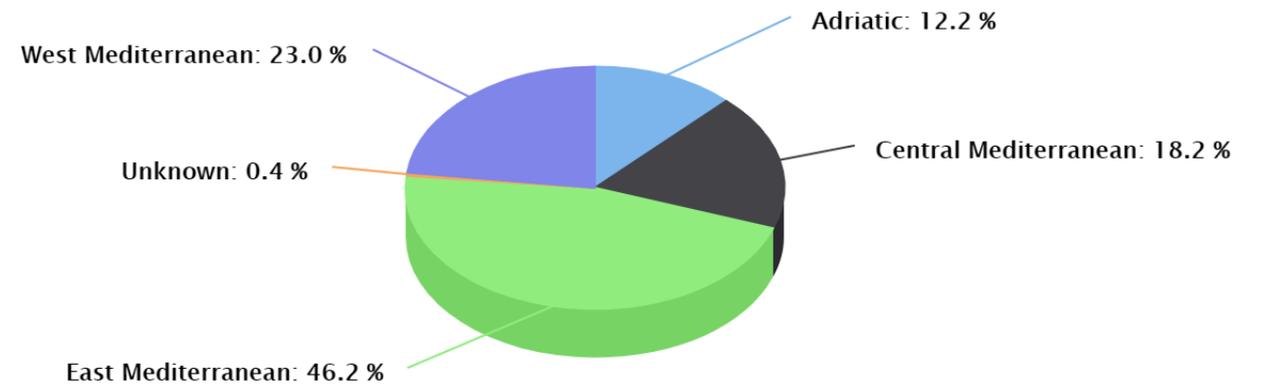
MArine Mediterranean non-indigenous and InvAsive Species Database (MAMIAS)

Ecological sub-regions in the Mediterranean



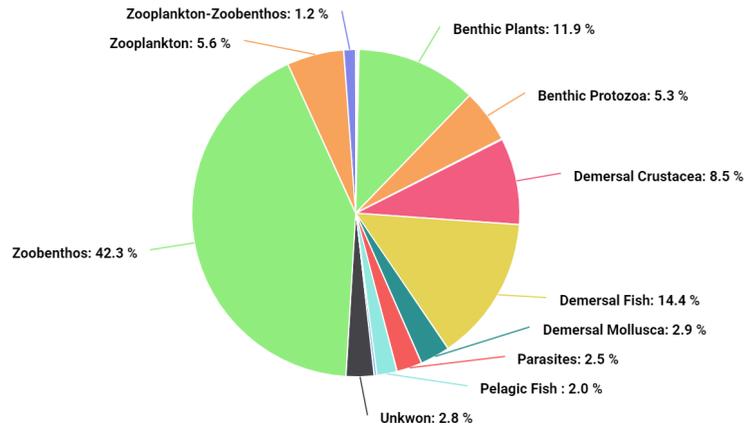
Source: UNEP/MAP, 2011

Number of Reported NIS / EcAp Sub-region



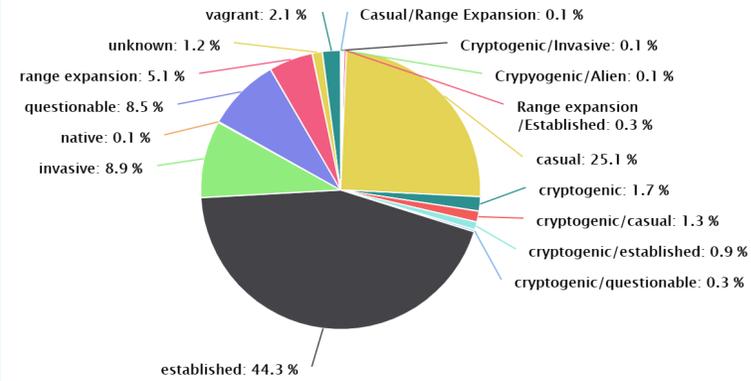
MArine Mediterranean non-indigenous and InvAsive Species Database (MAMIAS)

Ecofunctional Groups of Reported NIS



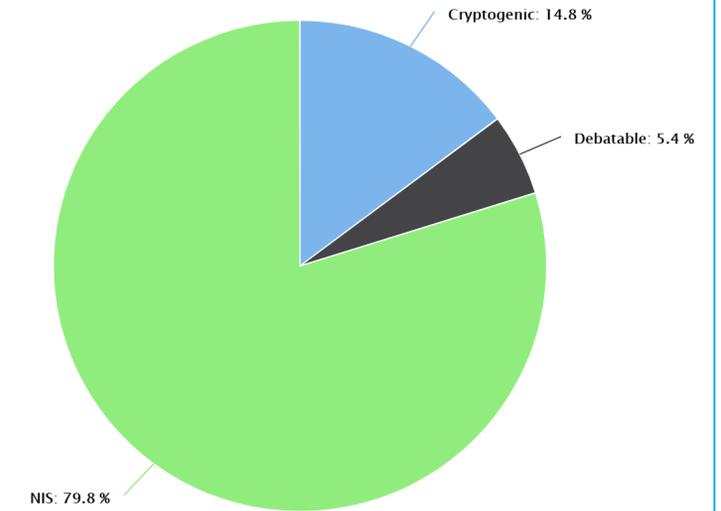
www.mamias.org

Establishment of the Reported NIS



www.mamias.org

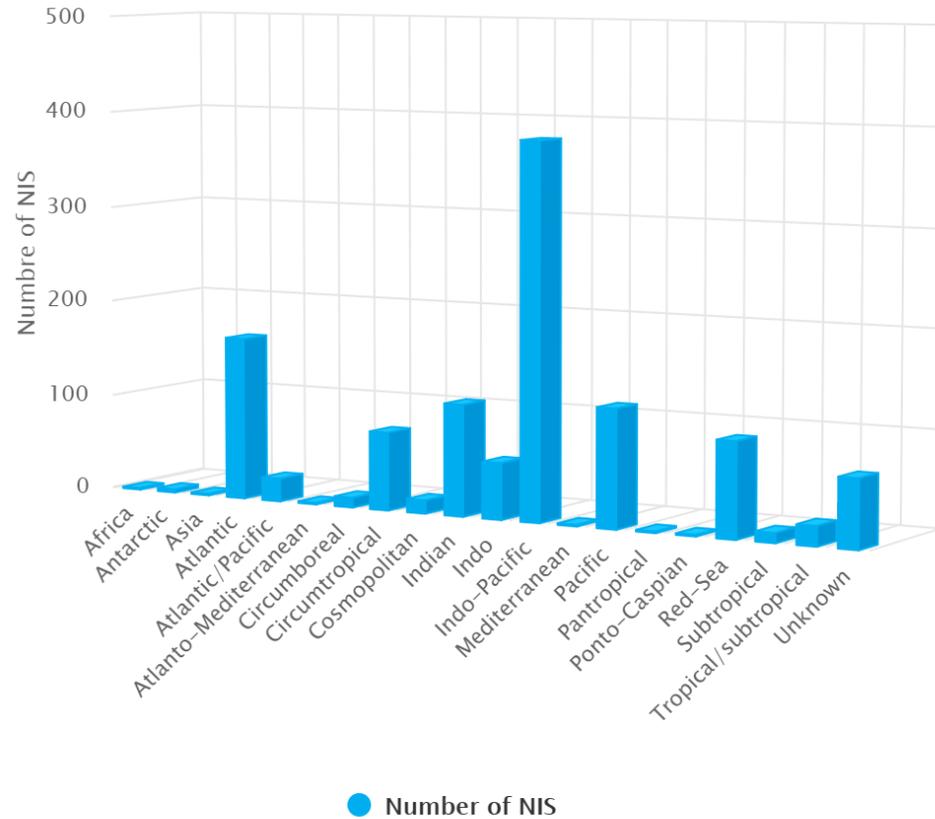
Status of the Reported NIS



www.mamias.org

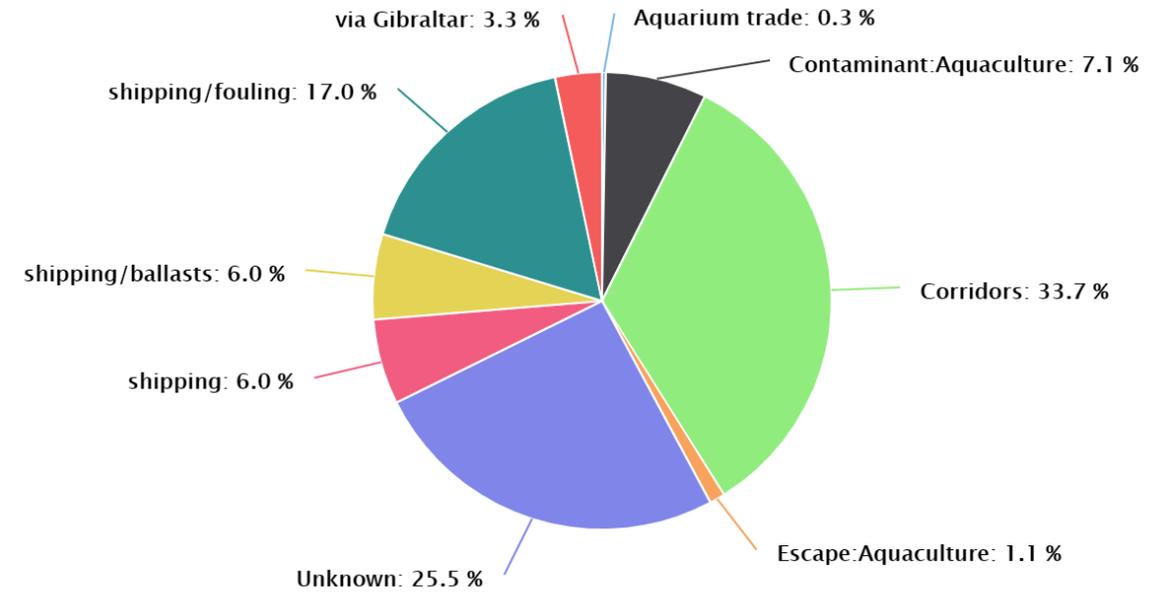
MArine Mediterranean non-indigenous and InvAsive Species Database (MAMIAS)

Origin of the Reported NIS



www.mamias.org

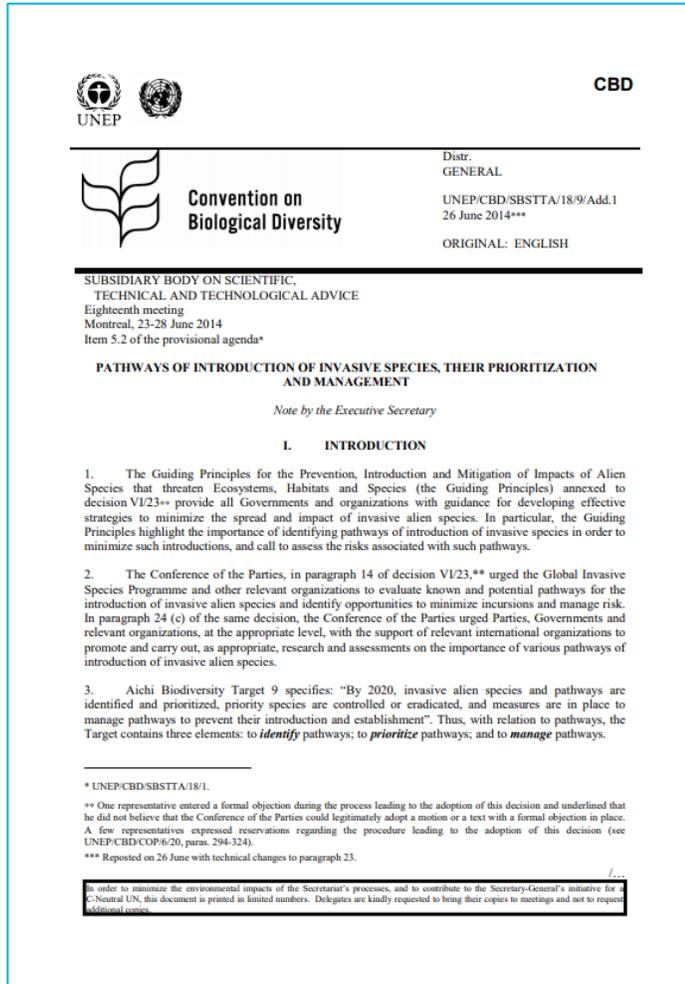
Number of Reported NIS per Pathway/Vector



www.mamias.org

CBD categorization of pathways (CBD 2014)

the CBD categorization of pathways (CBD 2014) should be adopted



The image shows the cover page of a document from the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) of the Convention on Biological Diversity (CBD). The document is titled 'PATHWAYS OF INTRODUCTION OF INVASIVE SPECIES, THEIR PRIORITIZATION AND MANAGEMENT' and is a note by the Executive Secretary. It was adopted at the Eighteenth meeting of SBSTTA in Montreal on 23-28 June 2014, under item 5.2 of the provisional agenda. The document is in English and is distributed generally. The cover page includes the UN logo, the CBD logo, and the text 'Convention on Biological Diversity'.

UNEP

CBD

Dist.
GENERAL

UNEP/CBD/SBSTTA/18/9/Add.1
26 June 2014***

ORIGINAL: ENGLISH

SUBSIDIARY BODY ON SCIENTIFIC,
TECHNICAL AND TECHNOLOGICAL ADVICE
Eighteenth meeting
Montreal, 23-28 June 2014
Item 5.2 of the provisional agenda*

PATHWAYS OF INTRODUCTION OF INVASIVE SPECIES, THEIR PRIORITIZATION AND MANAGEMENT

Note by the Executive Secretary

I. INTRODUCTION

1. The Guiding Principles for the Prevention, Introduction and Mitigation of Impacts of Alien Species that threaten Ecosystems, Habitats and Species (the Guiding Principles) annexed to decision VI/23** provide all Governments and organizations with guidance for developing effective strategies to minimize the spread and impact of invasive alien species. In particular, the Guiding Principles highlight the importance of identifying pathways of introduction of invasive species in order to minimize such introductions, and call to assess the risks associated with such pathways.

2. The Conference of the Parties, in paragraph 14 of decision VI/23,** urged the Global Invasive Species Programme and other relevant organizations to evaluate known and potential pathways for the introduction of invasive alien species and identify opportunities to minimize incursions and manage risk. In paragraph 24 (c) of the same decision, the Conference of the Parties urged Parties, Governments and relevant organizations, at the appropriate level, with the support of relevant international organizations to promote and carry out, as appropriate, research and assessments on the importance of various pathways of introduction of invasive alien species.

3. Aichi Biodiversity Target 9 specifies: "By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment". Thus, with relation to pathways, the Target contains three elements: to *identify* pathways; to *prioritize* pathways; and to *manage* pathways.

* UNEP/CBD/SBSTTA/18/1.

** One representative entered a formal objection during the process leading to the adoption of this decision and underlined that he did not believe that the Conference of the Parties could legitimately adopt a motion or a text with a formal objection in place. A few representatives expressed reservations regarding the procedure leading to the adoption of this decision (see UNEP/CBD/COP/6/20, paras. 294-324).

*** Reprinted on 26 June with technical changes to paragraph 23.

In order to minimize the environmental impacts of the Secretariat's processes, and to contribute to the Secretary-General's initiative for e-Neutral UN, this document is printed in limited numbers. Delegates are kindly requested to bring their copies to meetings and not to request additional copies.

Transport stowaway: moving of live organisms by maritime transport via various vectors: ballast water and sediments (T-S/ballast water), bio-fouling of ships, boats, offshore oil and gas platforms and other water vessels (T-S/hull fouling) and dredging, angling or fishing equipment (T-S/other).

Release in nature: intentional introduction of live alien organisms (e.g. for fishing or hunting in the wild).

Escape from confinement: movement of (potentially) invasive alien species from confinement (e.g. aquaculture).

Transport contaminant: unintentional movement of live organisms as (e.g. pests, through international trade).

Corridor: movement of alien organisms via transport infrastructure (e.g. canals).

Key messages(MedQSR 2017)

- Corridors are the most important pathways of new introductions in the Mediterranean, followed by shipping and aquaculture.
- A considerable increase is noticeable in the trends of new non-indigenous species introduced to the Mediterranean Sea.
- Progress has been made in creating national and regional inventories of non-indigenous species and assessing their pathways and impacts.
- Evidence for most of the reported impacts of alien species is weak, mostly based on expert judgement; a need for stronger inference is needed based on experiments or ecological modelling. The assessment of trends in abundance and spatial distribution is largely lacking. NIS identification is of crucial importance, and the lack of taxonomical expertise has already resulted in several NIS having been overlooked for certain time periods. The use of molecular approaches including bar-coding are often useful besides traditional species identification.
- Regular dedicated monitoring and long- time series will be needed so that estimation of such trends is possible in the future. There is a need for better coordination at national and sub-regional level on NIS monitoring.





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Thank you !

Atef OUERGHI, Programme Officer - Ecosystem Conservation

Specially Protected Areas Regional Activity Centre (SPA/RAC)

Boulevard du Leader Yasser Arafat - B.P. 337 - 1080 Tunis Cedex - Tunisia

www.spa-rac.org