WebPanel 1. Data collection methods

We have developed a data framework in which we document information about individual invasive species, including their non-native range extent, threat to native biodiversity, and introduction pathways. Building on existing datasets, we have integrated information from a wide variety of sources and developed a geographically referenced Microsoft Access database of marine invasive species.

Our aim was to enable efficient and consistent data collection through effective design of the database and criteria (described below). To aid in this, we used database fields common to other data collection efforts wherever possible (eg IUCN SSC's Global Invasive Species Database [GISD], www.issg.org/database). This allowed us to collect data from those sources more efficiently, and will make it easier for others to incorporate our data into their work.

We present data only on marine species in this publication, but we are collecting data on freshwater and terrestrial species in parallel efforts, using consistent methods.

Information about data collected in our database and how we made decisions on documenting information is provided below. The database is available at http://conserveonline.org/workspaces/global.invasive.assessment.

General species information

We collected data on species that are established outside of their native range and have the potential to impact native species and biodiversity. Species that occur in and impact human-dominated habitats (eg aquaculture) have been included, but only their impact on natural habitats and native biodiversity has been recorded.

We documented basic information about each species, including:

- Scientific name
- Common name
- Whether the species lives in marine, freshwater, and/or terrestrial habitats
- Higher taxonomic group (list based on "organism type" in GISD):
 - o Algae
 - o Ascidian
 - o Bacterium
 - o Bryozoan
 - o Ectoprocta
 - o Fungus
 - o Invertebrate annelid
 - o Invertebrate arthropod crustacean
 - o Invertebrate arthropod insect

- o Invertebrate arthropod other
- o Invertebrate cnidarian
- o Invertebrate ctenophore
- o Invertebrate echinoderm
- o Invertebrate mollusk
- o Invertebrate mollusk (snail)
- o Invertebrate platyhelminth
- o Invertebrate porifera (sponges)
- o Nematode
- o Plant
- o Protozoa
- o Tunicate
- o Vertebrate amphibian
- o Vertebrate bird
- o Vertebrate fish
- o Vertebrate mammal
- o Vertebrate reptile
- o Virus

References

In an index of references, we noted bibliographic citation information and the type of documentation for each source.

Type of documentation – measure of reliability of data used to score, based on Cal-IPC (2003)

- Peer review (PR) published, peer-reviewed scientific evidence or floras/faunas
- Report (RE) non-peer-reviewed, published documents and reports
- Compilations (COMP PR/RE) source that is a compilation of data from PR and RE sources (eg existing databases of invasive species)
- Expert opinion (EO) confirmed, unpublished observations by a qualified professional
- Anecdotal (AN) unconfirmed, anecdotal information

Geography and habitat

In addition to non-native occurrences by ecoregion (described below), we collected descriptive information about distribution and habitats for each species, where data allowed. References for these data were documented.

- Origin description of the native range of a species
- First introduction description of the first reported introduction for which we found evidence
- Non-native distribution by country and other geographic units — Our focus was on documenting non-native ranges by ecoregion, but many data sources reported distributions using different units. We have captured this information in text fields.
- Habitat description text field describing the habitats in which a species is found

• Habitat – Species were noted as living in one or more of the marine habitats in the following list. To maintain consistency with existing databases, we based it on the habitat list in the GISD and included some additional marine habitat classes. This is not a formal classification of marine or coastal habitats, and we would also point out that the habitat classes are not mutually exclusive – many are nested or overlapping. Where relevant we documented multiple habitats for species:

o Aquaculture facilities o Benthic
o Brackish water o Canals
o Coastland o Coral reefs
o Estuaries/bays o Fouling communities
o Intertidal zones o Mangroves
o Marine habitats o Rocky habitats
o Shallow lagoons o Wetlands

Non-native occurrence by ecoregion

We have documented the non-native range of each species, defining non-native occurrences as ecoregions in which a species is established outside of its native range (marine ecoregions: www.nature.org/MEOW; Spalding et al. 2007). Reference(s) were included for each ecoregional occurrence.

As a rough indicator of the reliability of these data, we also noted whether an ecoregional occurrence was within the geographic scope of references used. For example, if a database of invasive species in the Mediterranean Sea states that a species is also found in the Philippines, we included that occurrence in the database, but noted that it was outside of the geographic scope of the data source (until we can confirm the occurrence with a source from that region).

Threat scores

Species were assigned a score for each of the following (where data allowed) to indicate the magnitude of the threat that it poses to native biodiversity: "ecological impact", "geographic extent", "invasive potential", and "management difficulty".

Our four threat scores are based on systems proposed by Salafksy et al. (2003), NatureServe (2004), and California Invasive Plant Council (Cal-IPC 2003). The following chart roughly compares the criteria of each to our scores:

The categories used to assign each score were devised so that they can be applied consistently to different types of species and to those living in marine, freshwater, and terrestrial habitats.

Scores were assigned globally for each species, not for specific occurrences. For consistency, we used the worst documented case to score a species. If data were ambiguous, we were conservative in assigning higher scores.

Below are descriptions of how we scored the threat of species and collected supporting data.

Ecological impact

Ecological impact measures the severity of the impact of a species on the viability and integrity of native species and natural biodiversity. The following information was captured in the database:

Score

- 4 Disrupts entire ecosystem processes with wider abiotic influences
- 3 Disrupts multiple species, some wider ecosystem function, and/or keystone species or species of high conservation value (eg threatened species)
- 2 Disrupts single species with little or no wider ecosystem impact
- I Little or no disruption
- U Unknown or not enough information to determine score

Text Description – succinct description to support score, including, if data allowed, description of the wider abiotic influences, ecosystem and species disruptions, and including geographic variation in impact if applicable

Sources – cited documentation for score and descriptive text

Species were scored based on the worst documented case, with conditions in that case noted in the text description field. Occurrences and conditions where there was less of an impact are described in the text description as well.

We were conservative in assigning higher scores when data were ambiguous. For example, if a species is known

	Salafsky et al.	NatureServe	Cal-IPC
Ecological impact	Severity/synergism	Ecological impact	Ecological impact
Geographic extent	Scope	Current distribution and abundance	Ecological amplitude and distribution
Invasive potential	Timing/likelihood	Trend in distribution and abundance	Invasive potential
Management difficulty	Reversibility	Management difficulty	na
Type of documentation	na	na	Level of documentation

to have economic impacts (eg fouling ship hulls), but its impacts in natural habitats have not been studied, we would assign it a low ecological impact score, pending more available data. Potential but unverified impacts were noted in the text description.

Some examples of the types of impacts that we assigned to each of the categories:

- 4 Causing large scale changes such as: altering community structure, causing localized to widespread extinctions, altering native level of activity (eg clogging waterways, altering natural topography)
- 3 Disrupting changes impacting more than a small number of species without causing localized extinctions, competition with threatened or keystone species, changing balance in ecosystem
- 2 Causing minor impact to a species or species group with no wider known impacts and without causing extinctions
- I Established, but little or no known impact; may be long-term resident, coexisting with native species

Geographic extent

Geographic extent measures the current extent of the species outside of its native range. The following information was captured in the database:

Score

- 4 Multi-ecoregion
- 3 Ecoregion
- 2 Local ecosystem/sub-ecoregion
- I Single site
- U Unknown or not enough information to determine score

Distribution within non-native range – locally patchy, locally pervasive, regionally patchy, regionally pervasive (approximate division between local/regional is ecoregion)

Text description – succinct description to support score

Sources – cited documentation for score and descriptive text

These categories were developed to indicate order of magnitude differences in non-native range, using a system that can be applied across marine, freshwater, and terrestrial habitats. We distinguished between the categories using the following criteria:

4 – Spans three or more ecoregions, cross continental, trans-oceanic

- 3 Established in no more than two adjoining ecoregions
- 2 More than one occurrence within one ecosystem
- I Single locality

As an additional description of the non-native distribution of a species, we noted the following, if data allowed:

Locally patchy – sightings or small communities established in localized area

Locally pervasive – dominant to similar flora/fauna in localized community

Regionally patchy – small, independent populations spanning two or more ecoregions

Regionally pervasive – dominant characteristics within all/most regional occurrences

Invasive potential

Invasive potential measures current/recent rate of spread and potential for future spread once introduced in a new habitat. The following information was captured in the database:

Score

- 4 Currently/recently spreading rapidly (doubling in < 10 years) and/or high potential for future rapid spreading
- 3 Currently/recently spreading less rapidly and/or potential for future, less rapid spreading
- 2 Established/present, but not currently spreading and high potential for future spreading
- I Established/present, but not currently spreading and/or low potential for future spreading
- U Unknown or not enough information to determine score

Text description – succinct description to support score and other information (eg description of dispersal methods, past invasions, and geographic variation)

Sources – cited documentation for score and descriptive text

We used both quantitative and qualitative descriptions of the spread of invasive species in a new habitat to assign a score. We distinguished between the categories using the following criteria:

- 4 Species has spread/invaded rapidly (doubling in < 10 years) after past introductions, indicating that it is likely to spread quickly after new invasions
- 3 Species has spread/invaded after past introductions and/or is likely to after new invasions, but not quickly enough to be scored a "4"

- 2 Species has not yet spread/invaded into the habitat in which it has been introduced, but it has characteristics/traits that indicate it is likely to spread/invade
- I Species has not and is not likely to in the future spread/invade once introduced

Management difficulty

Management difficulty measures effort required to reverse the threat and/or remove the species. The following information was captured in the database:

Score

- 4 Irreversible and/or can not be contained or controlled
- 3 Reversible with difficulty and/or can be controlled with significant ongoing management
- 2 Reversible with some difficulty and/or can be controlled with periodic management
- I Easily reversible, with no ongoing management necessary (eradication)
- U Unknown or not enough information to determine score

Text description – succinct description to support score

Sources – cited documentation for score and descriptive text

We used information about past or ongoing eradication and control efforts. We distinguished between the categories using the following criteria:

- 4 No known successful form of complete removal, eradication, or control
- 3 Removal and/or control require significant resources and effort; complete removal may require routine scheduled maintenance on regular basis
- 2 Removal and/or control do not require significant resources and effort, but seasonal controls and monitoring may be required
- I Known occurrences have been easily detected and eradicated; no recurrence or spread after eradication

Pathways

We documented all known and likely introduction pathways for each species in our database, adapting a list of "pathways" developed by the US National Invasive Species Council's Invasive Species Pathways Team (Campbell and Kriesch 2003; refined by Lodge et al. 2006). Their task was "developing a system for evaluating the significance of invasive species pathways" with

"pathways" defined broadly as "any means that allows entry or spread of an invasive species" (Campbell and Kriesch 2003). Although this system includes routes of introduction that are elsewhere classed as vectors (Carlton and Ruiz 2005) and categories are not always mutually exclusive, it allows the practical categorization of commonly reported information on pathways and vectors. We modified this system slightly, to better fit a global assessment and made category adjustments to allow effective gathering of data by species.

A summary of the marine pathways used is in Panel 2, and our full pathways list is provided in WebPanel 2.

The following information was captured in the database for each species:

Pathway – This field captured how a species is brought to new habitats (not local dispersal after it has been introduced). We documented all known and likely pathways for each species. The field was populated from the list of pathways described above (Panel 2, WebPanel 2)

For each pathway of a species, the following was also documented (as data allowed):

Introduction – describes the release itself (after a species travels on a pathway to a new habitat)

- Intentional deliberate release, authorized or not
- Accidental unintentional release, hitchhiker
- Not human assisted natural migration

Documented – this field allowed us to distinguish between pathways that are known for a species, and those that are likely (eg due to habitat, species vulnerabilities)

- Known documented case(s)
- Probable likely pathway for a species and/or for specific introduction
- Possible potential pathway (eg based on species physiology)

Cause – describes the driver of an invasion on a pathway (eg specific industries, food resource, ornamentation)

This type of field has been used in other databases to specifically describe the cause of one introduction, but it is difficult to repeat this level of detail in a global database. We are capturing typical/known modes of introduction, instead of the details of one introduction. For example, for the introduction of a diatom via the "ballast water" pathway, we usually can not get enough detailed information to narrow the cause to the type of ship/industry.

Description – text field to capture details about introductions (eg specific cases)

References – documented for each species' pathway

References

- Cal-IPC (California Invasive Plant Council). 2003. Criteria for categorizing invasive non-native plants that threaten wildlands. www.cal-ipc.org/ip/inventory/pdf/Criteria.pdf. Viewed 23 Mar 2005.
- Campbell F and Kriesch P. 2003. Final report by the National Invasive Species Council's Invasive Species Pathways Team of the Prevention Working Group. www.invasivespeciesinfo.gov/council/wrkgrps.shtml.Viewed 30 Aug 2006.
- Lodge DM, Williams S, MacIsaac HJ, et al. 2006. Biological invasions: recommendations for US policy and management. *Ecol Appl* 16: 2035–54.
- NatureServe. 2004. An invasive species assessment protocol: evaluating non-native plants for their impact on biodiversity. www.natureserve.org/library/invasiveSpeciesAssessmentProtocol.pdf. Viewed 4 Aug 2005.
- Salafsky N, Salzer D, Ervin J, et al. 2003. Conventions for defining, naming, measuring, combining, and mapping threats in conservation. Bethesda, MD: Foundations of Success. http://fosonline.org/images/Documents/Conventions_for_Threats_in_Conservation.pdf. Viewed 7 Sep 2004.
- Spalding MD, Fox HE, Allen GR, et al. 2007. Marine ecoregions of the world: a bioregionalization of coast and shelf areas. *BioScience* **57**: 573–83.

WebPanel 2. Alien species pathway framework

Adapted from NISC Invasive Species Pathway Team's outline (Campbell and Kriesch 2003)

I. Transportation-related pathways

- A. Modes of transportation
 - I. Air transportation
 - a) Wheel wells
 - b) Cabin
 - c) Cargo holds
 - 2. Freshwater/marine transportation
 - a) Ballast and/or fouling
 - (I) Ballast water and sediments
 - (2) Hull/surface fouling
 - b) Stowaways in holds
 - c) Superstructures/structures above the waterline
 - d) Dredge spoil material
 - e) Canals that connect waterways
 - 3. Land/terrestrial transportation
 - a) Cars, trucks, buses, ATVs, etc
 - b) Construction equipment and firefighting equipment
 - c) Trains, subways, metros, monorails
 - d) Hikers, horses, pets
- B. Items used in shipping process
 - I. Containers both exterior and interior
 - 2. Packing materials
 - a) Wood packing materials
 - b) Seaweed
 - c) Other plant materials
 - d) Sand/earth
- C. Tourism/travel/relocation
 - 1. Travelers themselves
 - 2. On baggage and gear
 - 3. Transported pets/plants and animals transported for entertainment
 - 4. Travel consumables
- D. Mail/internet/overnight shipping companies

II. Commerce in living organisms pathways

- A. Live seafood trade
- B. Livestock
- C. Aquaculture and mariculture activities
 - i. Enclosed facilities
 - 2. Stocking in open water
- D. Pet, aquarium, and water garden trade
- E. Bait industry
- F. Biocontrol
- G. Nurseries/garden/landscaping
 - I. Whole plants
 - 2. Plant parts
- H. Agricultural and forestry species trade
 - I. Whole plants
 - 2. Plant parts
- I. Plants and plant parts as food
- J. Other animal trade
- K. Other plant trade
 - I. Whole plants
 - 2. Plant parts

III. Other human-assisted pathways

- A. Ecosystem disturbance
 - 1. Short-term disturbances that facilitate introduction
 - 2. Long-term disturbances that facilitate introduction
- B. Climate change
- IV. Natural spread

WebPanel 3. Marine data sources in database

In general, "databases and atlases" were the initial sources of species that we included in our database. We then used "articles and reports" and "other web sources" to supplement species information on occurrences, pathways, and threat scoring. We have not included all the information available in each of the local datasets listed.

Databases and atlases

Database/atlas name	Access information
IUCN-ISSG's Global Invasive Species Database	www.issg.org/database
FishBase	www.fishbase.org
FIGIS: FAO's Fisheries Global Information System	www.fao.org/fi/figis/
AquaInvader: Database of Aquatic Invasive Species of Europe	www.zin.ru/rbic/projects/aquainvader/searchmain.asp
NAS: USGS's Nonindigenous Aquatic Species Database	http://nas.er.usgs.gov
NIMPIS: Australia's National Introduced Marine Pest Information System	www.marine.csiro.au/crimp/nimpis/
CIESM Atlas of Exotic Species in the Mediterranean	www.ciesm.org/atlas/
NEMESIS: Smithsonian Environmental Research Center's National Exotic	
Marine and Estuarine Species Information System	http://invasions.si.edu/nemesis/
NatureServe Explorer	www.natureserve.org/explorer/
Australia Weed Database	www.weeds.org.au
Invasive Plants of Canada Project	www.plantsincanada.com/
CERC's Introduced Species Summary Project	www.columbia.edu/itc/cerc/danoff-burg/invasion_
	bio/inv_spp_summ/invbio_plan_report_home.html
Gulf States Marine Fisheries Commission's Non-Native Aquatic	
Species Summaries	http://nis.gsmfc.org/nis_alphabetic_list.php
Baltic Sea Alien Species Database	www.ku.lt/nemo/alien_species_directory.html
	D. D. D. L. LCE, IV. D. AND 2007 C. VI. WALLEY V.
Invasive species in the Pacific northwest	Boersma PD, Reichard SE, and Van Buren AN. 2006. Seattle, WA: University
Le silling to the sil	of Washington Press
Intertidal Marine Invertebrates in the Puget Sound	www.nwmarinelife.com/
Exotic Aquatics on the Move: A Joint Project of National Sea Grant	
Network and Geographic Education Alliances	www.iisgcp.org/EXOTICSP/
Caspian Sea Biodiversity Database	www.caspianenvironment.org/biodb/eng/main.htm
AlgaeBase	www.algaebase.org/
Belgian Forum on Invasive Species' Harmonia Database	http://ias.biodiversity.be
APIRS Online: The Database of Aquatic, Wetland, and Invasive Plants	http://plants.ifas.ufl.edu/search80/NetAns2/
Great Lakes Aquatic Nonindigenous Species List	www.glerl.noaa.gov/res/Programs/invasive/anscommon052703.html
NOBANIS: North European and Baltic Network on Invasive Species	www.nobanis.org/Factsheets.asp
JNCC's Non-native marine species in British waters: a review and	
directory	www.jncc.gov.uk
MarLIN: The Marine Life Information Network for Britain and Ireland	www.marlin.ac.uk/
Invasive Aliens in Northern Ireland	www.habitas.org.uk/invasive
Government of Western Australia – Dept of Fisheries: Introduced	
Marine Aquatic Invaders – A Field Guide	www.fish.wa.gov.au/docs/pub/IMPMarine/index.php?0506
Alien Species in Swedish Sea Areas / Frammande Arter / Svenska	
Hav – Sweden	www.frammandearter.se/
Alien and Invasive Algae in Hawai'i	www.botany.hawaii.edu/GradStud/smith/websites/m-kupeke.htm
Marine Algae of Hawai`i	www.hawaii.edu/reefalgae/invasive_algae/
Invasive Species of Long Island Sound	www.seagrant.uconn.edu/INVID.HTM
Harmful Plankton Project:The user-friendly guide to harmful phyto-	
plankton in EU waters	www.liv.ac.uk/hab/Data%20sheets/p_mini.htm
University of California–Davis, Agriculture and Natural Resources	
Database	http://ucce.ucdavis.edu/datastore/datareport.cfm?searcher=&survey
	number=182&reportnumber=42&Submit.x=58&Submit.y=13
	/

WebPanel 3. M	larine data sources in database – Conti	inued		
Articles and	l reports			
Author	Title	Year	Website	Journal/report information
Ahyong S	Range extension of two invasive crab species in eastern Australia: Carcinus maenas (Linnaeus) and Pyromaia tuberculata (Lockington)	2005		Mar Pollut Bull 5 0 : 460–62
Ahyong ST et al.	First Mediterranean record of the Indo-West Pacific mantis shrimp, <i>Clorida albolitura</i> Ahyong and Naiyanetr, 2000 (Stomatopoda, Squillidae)	2006	www.aquaticinvasions.ru/2006/AI_ 2006_I_3_Ahyong_Galil.pdf	Aquatic Invasions 1:191–93
Akyol O et al.	First confirmed record of Lagocephalus sceleratus (Gmelin, 1789) in the Mediterranean Sea	2005		J Fish Biol 66 : 1183–86
Aligizaki K et al.	The presence of the potentially toxic general Ostreopsis and Coolia (Dinophyceae) in the North Aegean Sea, Greece	2006		Harmful Algae 5 :717–30
Andreakis N et al.	Asparagopsis taxiformis and Asparagopsis armata (Bonnemaisoniales, Rhodophyta): genetic and morphological identification of Mediterranean populations	2004		Eur J Phycol 3 9 : 273–83
Andrews JD	Effects of tropical storm Agnes on epifaunal invertebrates in Virginia estuaries	1973		Chesapeake Sci I 4 : 223–34
Armonies W	What an introduced species can tell us about the spatial extension of benthic populations	2001	www.int-res.com/articles/meps/209/ m209p289.pdf	Mar Ecol-Prog Ser 209 : 289–94
Ashton G et al.	Global distribution of the alien marine amphipod Caprella mutica	2004	http://66.165.102.189/pdf/24Friday/ A/fri_a_e_am/Gail_Ashton.pdf	13th International Conference on Aquatic Invasive Species
Ashton G et al.	Rapid assessment of the distribution of marine non-native species in marinas in Scotland	2006	www.aquaticinvasions.ru/2006/AI_ 2006_1_4_Ashton_etal_1.pdf	Aquatic Invasions 1:209–13
Avent SR	Distribution of Eurytemora americana (Crustacea, Copepoda) in the Duwamish River estuary, Washington		www.ocean.washington.edu/ people/oc549/savent/projects/ duwamish.htm	Unpublished report: University of Washington, School of Oceanography
Bachelet G et al.	Invasion of the eastern Bay of Biscay by the nassariid gastropod Cyclope neritea: origin and effects on resident fauna	2004	www.int-res.com/articles/meps2004/ 276/m276p147.pdf	Mar Ecol-Prog Ser 276 : 147–59
Bailey RJE et al.	Predatory interactions between the invasive amphipod Gammarus tigrinus and the native opossum shrimp Mysis relicta	2006		J North Am Benthol Soc 25: 393–405
Bailey-Brock JH	A new record of the polychaete <i>Boccardia proboscidea</i> (Family Spionidae), imported to Hawai`i with oysters	2000	www.uhpress.hawaii.edu/journals/ps/ PS541.html	Pac Sci 5 4 : 27–30
Baker P et al.	Nonindigenous marine species in the greater Tampa Bay ecosystem	2004	http://dl.nwrc.gov/net_prod_download/ /public/gom_net_pub_products/DOC/ Tech-02-04-Invasives.pdf	Tampa Bay Estuary Program Technical Publication # 02-04
Bakir K et al.	Contribution to the knowledge of alien amphipods off the Turkish coast: <i>Gammarposis togoensis</i> (Schellenberg, 1925)	2007	www.aquaticinvasions.ru/2007/AI_ 2007_2_1_Bakir_etal.pdf	Aquatic Invasions 2:80–82
Ballesteros E et al.	Mortality of shoots of Posidonia oceanica following meadow invasion by the red alga Lophocladia lallemandii	2007		Bot Mar 5 0 : 8–13
Band-Schmidt CJ et al.	Culture studies of Alexandrium affine (Dinophyceae), a non-toxic cyst forming dinoflagellate from Bahia Concepcion, Gulf of California	2003		Bot Mar 46 : 44–54
				(Continued)

Articles and	reports			
Author	Title	Year	Website	Journal/report information
Barse AM	Distribution of the swim bladder nematode, Anguillicola crassus, among Chesapeake Bay American eels, Anguilla rostrata	1999	www.sdafs.org/meetings/99sdafs/ physio/barse1.htm	From the 1999 Southern Division of the American Fisheries Society Midyear Meeting held in Chattanooga, Tennessee
Bellemo G et al.	First report of a filamentous species of Desmarestia (Desmarestiaceae, Fucophyceae) in the Lagoon of Venice (Italy, Mediterranean Sea)	2001		Bot Mar 44 : 541–45
Bij de Vaate A <i>et al</i> .	Geographical patterns in range extension of Ponto-Caspian macroinvertebrate species in Europe		http://article.pubs.nrc-2002cnrc.gc. ca/ppv/RPViewDoc?_handler_ =HandleInitialGet&journal=cjfas& volume=59&calyLang=eng&articleFile =f02-098.pdf	Can J Fish Aquat Sci 59 : 1159–74
Bilecenoglu M et <i>al</i> .	Range extension of three lessepsian migrant fish (Fistularia commersoni, Sphyraena flavicauda, Lagocephalus suezensis) in the Mediterranean Sea	2002		J Mar Biol Ass UK 82 : 525–26
Bilecenoglu M et al.	Range expansion of silverstripe blaasop, Lagocephalus sceleratus (Gmelin 1789), to the northern Aegean Sea	2006		Aquatic Invasions 1:289–9
Bjaerke MR et al.	Effects of temperature and salinity on growth, reproduction and survival in the introduced red alga <i>Heterosiphonia japonica</i> (Ceramiales, Rhodophyta)	2004		Bot Mar 47 : 373–80
Blua A	Caspian: influx of killer jellyfish threatens fish stocks	2004	www.rferl.org/featuresarticle/2004/06/ d4beb0c9-eaec-4030-b330-e93fb 974c99f.html	Radio Free Europe
Bolch CJS	A review of the molecular evidence for ballast water introduction of the toxic dinaflagellates Gymnodinium catenatum and the Alexandrium "tamarensis complex" to Australia	2007		Harmful Algae 6 : 465–85
Bolton TF et al.	Chemical mediation of sperm activity and longevity in the solitary ascidians Ciona intestinalis and Ascidiella aspersa	1996	www.biolbull.org/cgi/reprint/190/ 3/329.pdf	Biol Bull I 9 0 : 329–35
Bosa CR et al.	Peracarids associated to worm reefs of Phragmatopoma caudata (Kröyer) (Polychaeta, Sabellariidae) from Caiobá beach, Matinhos, Paraná	2002		Rev Bras Zool 19 : 135–47
Branham JM et al.	Coral-eating sea stars Acanthaster planci in Hawai`i	1971		Science 172: 1155–57
Bravo I et al.	Resting cysts of the toxigenic dinoflagellate genus Aledandrium in recent sediments from the Western Mediterranean coast, including the first description of cysts of A kutnerae and A peruvianum	2006		Eur J Phycol 4 I : 293–302
Brock BJ	On some south Australian Caulerpa species	2005	www.mlssa.asn.au/journals/2005 Journal.htm	Marine Life Society of Society Australia Inc 2005 Journal
Brunetti R and Mastrototaro F	The non-indigenous stolidobranch ascidian <i>Polyandrocarpa zorritensis</i> in the Mediterranean: description, larval morphology and pattern of vascular budding	2004	www.mapress.com/zootaxa/2004f/ z00528f.pdf	Zootaxa 528 : I–8
Burton D	Control of colonial hydroid macrofouling by free-field ultrasonic radiation	1984		Science 223 : 1410–11
				(Continu

Author	Title	Year	Website	Journal/report information
Bushek D	Seasonal abundance and occurrence of the Asian isopod Synidotea laevidorsalis in Delaware Bay, USA	2006	www.hsrl.rutgers.edu/PDFs/Isopod.pdf	Biological Invasions 00 : 1–6
Calcinai B et al.	Dispersal and association of two alien species in the Indonesian coral reefs: the octocoral Carijoa riisei and the demosponge Desmapsamma anchorata	2004		J Mar Biol Ass UK 84 : 937–41
California Regional Water Quality Control Board: San Francisco Bay Region	Prevention of exotic species introductions to the San Francisco Bay Estuary: a total maximum daily load report to USEPA	2000	www.swrcb.ca.gov/rwqcb2/download/ Tmdl.pdf	California Regional Water Quality Control Board San Francisco Bay Region
Cannicci S	Racing across the Mediterranean – first record of <i>Percnon gibbesi</i> (Crustacea: Decapoda: Grapsidae) in Greece	2006	www.mba.ac.uk/jmba/pdf/5300.pdf	JMBA2 – Published online
Cardigos F et al.	Non-indigenous marine species of the Azores	2006		Helgol Mar Res 60 : 160–69
Carlton JT	Introduced invertebrates of San Francisco Bay	1979	www.estuaryarchive.org/archive/ conomos_1979	In: Conomos TJ (Ed) San Francisco Bay: the urbanized estuary
Carlton JT	Introduced marine and estuarine mollusks of North America: an end-of-the-20th-century perspective	1992	www.sgnis.org/publicat/papers/jsr11 _2.pdf	J Shellfish Res 11:489–505
Castilla JC et al.	Recent introduction of the dominant tunicate, Pyura praeputialis (Urochordata, Pyuridae) to Antofagasta, Chile	2002		Mol Ecol 1 1: 1579–84
Castilla JC et al.	Down under the southeastern Pacific: marine non-indigenous species in Chile	2005	www.bio.puc.cl/caseb/pdf/prog6/Castilla %20etal_Biological%20invasions_ 2005.pdf	Biol Invasions 7:213–32
Cevik C et al.	A new record of an alien jellyfish from the Levantine coast of Turkey – Cassiopea andromeda (Forsskal, 1775)	2006	www.aquaticinvasions.ru/2006/AI_ 2006_I_3_Cevik_etal.pdf	Aquatic Invasions 1:196–97
Ceviker D et al.	Three alien molluscs from Iskenderun Bay (SE Turkey)	2006	www.aquaticinvasions.ru/2006/AI_ 2006_I_2_Ceviker_Albayrak.pdf	Aquatic Invasions 1:76–79
Chase C et al.	Marine bioinvasions fact sheet: New England marine bioinvaders		http://massbay.mit.edu/resources/pdf/case-studies.pdf	Sea Grant Fact Sheet
Chester RH	Destruction of Pacific coast corals by the sea star Acanthaster planci	1969		Science I 65 : 280–83
Cho TO et <i>al</i> .	Antithamnion nipponicum (Ceramiaceae Rhodophyta), incorrectly known as A pectinatum in western Europe, is a recent introduction along the North Carolina and Pacific coasts of North America	2007		Eur J Phycol 40 : 323–35
CIESM	Alien marine organisms introduced by ships in the Mediterranean and Black Seas	2002	hwww.ciesm.org/online/monographs/ lstanbul02.pdf	CIESM Workshop Monographs n 20
Çinar ME	Serpulid species (Polychaeta: Serpulidae) from the Levantine coast of Turkey (eastern Mediterranean), with special emphasis on alien species	2006	www.aquaticinvasions.ru/2006/AI_	Aquatic Invasions 1:233–40

www.frontiersinecology.org © The Ecological Society of America

WebPanel 3. N	Marine data sources in database – Conti	nued		
Articles and	d reports			
Author	Title	Year	Website	Journal/report information
Çinar ME et al.	Temporal changes of soft-bottom zoobenthic communities in and around Alsancak Harbor (Izmir Bay, Aegean Sea), with special attention to the autecology of exotic species	2006	www.blackwell-synergy.com/doi/abs/ 10.1111/j.1439-0485.2006.00102.x	Mar Ecol 27 : 229
Çinar ME et al.	New records of alien species on the Levantine coast of Turkey	2006	www.aquaticinvasions.ru/2006/AI_2006 _I_2_Cinar_etal.pdf	Aquatic Invasions 1:84–90
Cohen AN	Nonindigenous aquatic species in a United States estuary: a case study of the biological invasions of the San Francisco Bay and Delta	1995	www.anstaskforce.gov/Documents /sfinvade.htm	A report for the US Fish a Wildlife Service and the National Sea Grant Colleg Program Connecticut Sea Grant
Cohen AN	An exotic species detection program for Puget Sound	2004	www.sfei.org/bioinvasions/Reports/ 2004-PugetSoundESDP380.pdf	Report for Puget Sound Action Team, Olympia, Washington
Cohen AN et al.	Washington State Exotics Expedition 2000: a rapid survey of exotic species in the shallow waters of Elliott Bay, Totten and Eld Inlets, and Willapa Bay	2000	http://faculty.washington.edu/cemills/ WSX2000.pdf	
Cohen AN et al.	A rapid assessment survey of exotic species in sheltered coastal waters	2002	www.sfei.org/bioinvasions/Reports/ 2002-2000SoCalifsurvey_384.pdf	Project Report for the Southern California Exotic Expedition 2000
Coles SL et al.	Nonindigenous species introductions on coral reefs: a need for information	2002	http://hbs.bishopmuseum.org/pdf/56 (2)p191-209.PDF	Pac Sci 56 : 191–209
Collin R et al.	Research note: <i>Crepidula convexa</i> Say, 1822 (Caenogastropoda: Calyptraeidae) in Washington State, USA	2006		Am Malacol Bull 21:113–16
Colorni A et al.	Fusariosis in the shrimp Penaeus semisulcatus cultured in Israel	1989		Mycopathologia 108: 145–4
Cook CDK et al.	A revision of the genus <i>Elodea</i> (Hydrocharitaceae)	1985	http://el.erdc.usace.army.mil/aqua/apis/ plants/html/elodea_c.html	Aquat Bot 21 : 111–56
Cordell JR	Asian copepods in Pacific Northwest estuaries	1998	www.psat.wa.gov/Publications/psnotes _pdf/psnote41.pdf	Puget Sound Notes No 41
Cordell JR et al.	The invasive Asian copepod <i>Pseudodiaptomus inopinus</i> in Oregon, Washington, and British Columbia estuaries	1996	www.sgnis.org/publicat/cordeljr.htm	Estuaries I 9 : 629–38
Corsini M et al.	Lessepsian migrant <i>Fistularia commersonii</i> from Rhodes marine area	2002		J Fish Biol 6 1 : 1061–62
Corsini M et al.	Lessepsian migration of fishes to the Aegean Sea: first record of <i>Tylerius spinosissimus</i> (Tetraodontidae) from the Mediterranean, and six more fish records from Rhodes	2005	http://elnais.ath.hcmr.gr/PDF/Corsini _2005.pdf	Cybium 29 : 347–54
Corsini M et al.	On the occurrence of two brachyurans, Myra subgranulata and Hebstia condyliata, on Rhodes Island (SE Aegean Sea)	2006	http://elnais.ath.hcmr.gr/PDF/MYRA% 20SUBGRANULATA_HERBSTIA%20 CONDYLIATA.pdf	Crustaceana 79 : 167–74
Corsini M et al.	Three new exotic fish records from the SE Aegean Greek waters	2006		Sci Mar 70 : 319–23
CSIRO	Marine Pests Information Sheets	2000	www.marine.csiro.au/crimp/Marine_ pest_infosheets.html	
				(Continue

	arine data sources in database – <i>Conti</i>	nueu		
Articles and	reports			
Author	Title	Year	Website	Journal/report information
Curiel D et al.	First report of <i>Polysiphonia morrowii</i> Harvey (Ceramiales, Rhodophyta) in the Mediterranean Sea	2002		Bot Mar 45 : 66–70
Currie DR	Changes to benthic communities over 20 years in Port Phillip Bay, Victoria, Australia	1999		Mar Pollut Bull 38: 36–43
Currie DR et al.	Exotic marine pests in the Port of Geelong, Victoria	1998		Marine and Freshwater Resource Institute Report No 8
da Rocha RM et al.	Introduced ascidians in Paranagua Bay, Parana, southern Brazil	2005	www.scielo.br/scielo.php?script=sci_ arttext&pid=S0101-81752005000400 052#fig08	Rev Bras Zool 22 : 1170–84
Dahlberg MD	Toxicity of acrolein to barnacles (Balanus eburneus)	1971 1	http://estuariesandcoasts.org/cdrom/ CPSC1971_12_4_282_284.pdf	Chesapeake Sci I 2 : 282–84
D'Archino R et al.	Invasive marine red algae introduced to New Zealand waters: first record of <i>Grateloupia</i> <i>turuturu</i> (Halymeniaceae, Rhodophyta)	2007		NZ J Mar Freshwat Res 41: 35–42
Daunys D et al.	Invasion of the North American amphipod (Gammarus tigrinus Sexton, 1939) into the Curonian Lagoon, Southeastern Baltic Sea	2006	www.ekoi.lt/uploads/docs/2006_I_ 20-26%20psl.pdf	Acta Zool Lit I 6 : 20–26
De Blauwe H et al.	Extension of the range of the bryozoans Tricellaria inopinata and Bugula simplex in the north-east Atlantic ocean (Bryozoa: Cheilostomatida)	2001		Nederlandse Faunistische Mededelingen I 4 : 103–12
de la Cruz F et al.	Lista actualizada de los gasteropodos de la planicie del Arrecife Lobos, Veracruz, Mexico	2006	www.udoagricola.150m.com/V6UDO Ag/V6Vicencio128.pdf	Revista UDO Agricola 6 : 128–37
De Rincon O	Studies on selectivity and establishment of "Pelo de Oso" (<i>Garveia franciscana</i>) on metallic and non-metallic materials submerged in Lake Maracaibo, Venezuela	2003		Anti-Corros Methods Mater 5 0 : 17–24
Det Norske Veritas	Ballast Water Scoping Study	2005	www.defra.gov.uk/science/Project_ Data/DocumentLibrary/ME3113/ ME3113_3506_FRP.pdf	Project No 3120018
Dijkstra JA et al.	Distribution and ecology of four colonial ascidians: Botryllus schlosseri, Botrylloides violaceus, Diplosoma listerianum and Didemnum sp in the Gulf of Maine	2005	www.whoi.edu/page.do?pid=11421&cid=16297&c=2	2005 International Invasive Sea Squirt Conference Presentation Abstract
Dulcic J	Northernmost occurrence of Sphoeroides pachygaster (Tetraodontidae) in the Adriatic Sea	2002		Bull Mar Sci 70 : 133–39
Dulcic J et al.	First record of the marbled spinefoot Siganus rivulatus (Pisces: Siganidae) in the Adriatic Sea	2004		J Mar Biol Ass UK 84 : 1087–88
Dyrynda PE et al.	The distribution, origins and taxonomy of Tricellaria inopinata d'Hondt and Occhipinti Ambrogi, 1985, an invasive bryozoan new to the Atlantic	2000		J of Nat Hist 3 4 : 1993–200
Edinger GJ et al. (Eds)	Marine and estuarine	2002	www.dec.state.ny.us/website/dfwmr/ heritage/marine_estuarine.pdf	In: Ecological communities New York State, 2nd edn./ revised and expanded edition of Carol Reschke's Ecological communities of New York State (draft for review)
				(Continu

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webPanel 3. M	arine data sources in database – Conti	inued		
Articles and	reports			
Author	Title	Year	Website	Journal/report information
Eldredge LG and Smith CM (Eds)	A guidebook of introduced marine species of Hawai'i	2001	www2.bishopmuseum.org/HBS/ invertguide/index.htm	Bishop Technical Report 21
Elsam	Elsam Offshore Wind Turbines - Horns Rev/ Annual status report for the environmental monitoring programme	2004	www.hornsrev.dk/Miljoeforhold/ miljoerapporter/HR_annual%20 report%202004%20version%20110 72005.pdf	
Epifanio CE	Transport of blue crab (Callinectes sapidus) larvae in the waters off mid-Atlantic states	1995 I		Bull Mar Sci 57 : 569–706
Fashchevsky B	Human impact on rivers and fish in the Ponto- Caspian Basin	2003	www.fao.org/docrep/007/ad525e/ad 525e0d.htm	FAO – Proceedings of the second international sympo sium on the management clarge rivers for fisheries
Fenner D	Biogeography of three caribbean corals (Scleractinia) and the invasion of Tubastraea coccinea into the Gulf of Mexico	2001		Bull Mar Sci 69 : 1175–89
Fernandes LF et al.	The recently established diatom <i>Coscinodiscus</i> wailesii (Coscinodiscales, Bacillariophyta) in Brazilian waters. I: remarks on morphology and distribution	2001		Phycol Res 49 : 89–96
Flimlin G et <i>al</i> .	Major predators of cultured shellfish	1993	http://aquanic.org/publicat/usda_rac/ efs/nrac/nbull18.pdf	Northeastern Regional Aquaculture Center Bulletin No 180-1993
Flores AAV et al.	Postlarval stages and growth patterns of the spider crab <i>Pyromaia tuberculata</i> (Brachyura, Majidae) from laboratory-reared material	2002		J Crust Biol 22 : 314–27
Foster BA et al.	Foreign barnacles transported to New Zealand on an oil platform	1979		N Z J Mar Freshw Res 13: 143–49
Foulquie M et al.	Regional project for the development of marine and coastal protected areas in the Mediterranean region (MedMPA)	2002	http://medmpa.rac-spa.org/pdf/Rapports Syrie/Report_Field%20survey%20Nov.% 202002%20ENG.pdf	
Galil BS	Biodiversity and invasion – how resilient is the Levant Sea?	1997	www.sviva.gov.il/Enviroment/Static/ Binaries/Articals/bio_inv_1.doc	Israel Environ Bull 30
Galil BS	Loss or gain? Invasive aliens and biodiversity in the Mediterranean Sea	2006		Mar Pollut Bull 55:314–22
Galil BS	Shipping impacts on the biota of the Mediterranean Sea	2006	http://ec.europa.eu/maritimeaffairs/contributions_post/18bella_galil.pdf	
Galil BS et al.	A sea change – exotics in the eastern Mediterranean	2002	www.biomareweb.org/downloads/ exotic_med.pdf	In: Leppakoski E et al.(Eds). Invasive aquatic species of Europe. Netherlands: Kluwe Academic Publishers
Garci ME et al.	Xenostrobus securis (Lamarck, 1819) (Mollusca: Bivalvia): first report of an introduced species in Galacian waters	2007		Aquacult Int I 5 : 19–24
Garono RJ	Addendum to the Deschutes River Estuary Restoration Study	2007	www.earthdesign.com/deschutes/ Deschutes-Inv-Jan-2007_final.pdf	Deschutes River Estuary Restoration Feasibility Study
Gaudet D	Atlantic Salmon: a white paper	2002	www.adfg.state.ak.us/special/as/docs/as _white2002.pdf	Report to Alaska Department of Fish and Game
				(Continued

Articles and	ronorts			
		.,		
Author	Title	Year	Website	Journal/report information
Gavio B et al.	Grateloupia turuturu (Halymeniaeae, Rhodophyta) is the correct name of the non-native species in the Atlantic known as Grateloupia doryphora	2002	http://72.14.253.104/search?q=cache: V3py0_0gfYQJ:morayeel.louisiana.edu/ SeaweedsLab/Fredericq/Grateloupia% 2520turuturu.pdf+Grateloupia+turuturu &hl=en&ct=clnk&cd=2≷=us	Eur J Phycol 37 : 349–59
Giacobbe MG et al.	Recurrent high-biomass blooms of Alexandrium taylorii (Dinophyceae), a HAB species expanding in the Mediterranean	2007		Hydrobiologia 580 : 125–33
Godwin S et al.	Reducing potential impact of invasive marine species in the northwestern Hawaiian Islands Marine National Monument	2005	http://cramp.wcc.hawaii.edu/Down/loads/TR_Godwin_et_al%20_Invasives_Final%20Draft.pdf	Hawaiian Coral Reef Assessment and Monitorin Program
Gofas S et al.	Exotic molluscs in the Mediterranean Basin: current status and perspectives	2003		Oceanogr Mar Biol Ann Rev 4 I: 237–77
Gokoglu M and Kaya Y	First record of <i>Melicertus hathor</i> (Penaeidae) from the Gulf of Antalya (Mediterranean Sea)	2005	www.mba.ac.uk/jmba/pdf/5177.pdf	JMBA2 — Biodiversity Records
Golani D	Impact of Red Sea fish migrants through the Suez Canal on the aquatic environment of the eastern Mediterranean	1998	http://environment.yale.edu/documents/downloads/0-9/103golani.pdf	Yale School of Forestry and Environmental Studies Bulletin 103
Golani D	First record of the bluespotted cornetfish from the Mediterranean Sea	2000		J Fish Biol 56 : 1545–47
Golani D	The Indo-Pacific striped eel catfish, <i>Plotosus lineatus</i> (Thunberg, 1787), (Osteichtyes: Siluriformes) a new record from the Mediterranean	2002		Sci Mar 66 : 321–23
Goren M et al.	A review of changes in the fish assemblages of Levantine inland and marine ecosystems following the introduction of non-native fishes	2005		J Appl Ichthyol 2 I : 364–70
Grabowski M	Rapid colonization of the Polish Baltic Coast by an Atlantic palaemonid shrimp <i>Palaemon elegans</i> Rathke, 1938	2006	www.aquaticinvasions.ru/2006/AI_ 2006_I_3_Grabowski.pdf	Aquatic Invasions 1:116–23
Gribble KE et al.	Distribution and toxicity of Alexandrium ostenfeldii (Dinophyceae) in the Gulf of Maine, USA	2005	www.whoi.edu/redtide/labweb/ publications/Gribble_etal_2005_SI.pdf	Deep-Sea Re (2 Top Stud Oceanogr) 5 2 : 2754–63
Haahti H and Kangas P (Eds)	State of the Gulf of Finland in 2004	2006	www.itameriportaali.fi/en/tietoa/ itamerentila/vuosiraportit/2004/en _GB/state_of_the_gulf_of_finland_ in_2004/	MERI – Report Series of th Finnish Institute of Marine Research No 55
Hadfield MG et al.	Metamorphic competence, a major adaptive convergence in marine invertebrate larvae	2001		Am Zool 41 : 1123–31
Haque A	Macrobenthic assemblages inhabiting mangrove forests and adjacent mudflats	2003	www.eicc.bio.usyd.edu.au/pubs/?DB= pubs&id=356	MSc thesis, University of Sydney
Harmelin-Vivieni ML et <i>al</i> .	The littoral fish community of the Lebanese rocky coast (eastern Mediterranean Sea) with emphasis on Red Sea immigrants	2005		Biol Invasions 7: 625–37
Hart T	Maine's marine invaders	2005	www.seagrant.umaine.edu/documents/pdf/MMI05.pdf	Sea Grant Fact Sheet
Hayward BW	Faunal changes in Waitemata Harbour sediments, 1930s–1990s	1997		J R Soc NZ 27 : 1–20
				(Continue

A				
Articles and	reports			
Author	Title	Year	Website	Journal/report information
Herkül K et al.	Distribution and population characteristics of the alien talitrid amphipod <i>Orchestia cavimana</i> in relation to environmental conditions in the northeastern Baltic Sea	2006		Helgol Mar Res 60 : 121–26
Hickerson EL et al.	The state of coral reef ecosystems of the Flower Garden Banks, Stetson Bank, and other banks in the northwestern Gulf of Mexico	2005	http://ccma.nos.noaa.gov/ecosystems/ coralreef/coral_report_2005/FGB_ Ch8_C.pdf	
Hoagland KE	Range extensions of teredinids (shipworms) and polychaetes in the vicinity of a temperatezone nuclear generating station	1980		Mar Biol 5 8 : 55–64
Hoffmeyer MS	Decadal change in zooplankton seasonal succession in the Bahía Blanca estuary, Argentina	2004		J Plankton Res 26 : 181–89
Hoffmeyer MS et al.	Eurytemora americana Williams, 1906, not Eurytemora affinis (Poppe, 1880), inhabits the Bahia Blanca estuary, Argentina*	2000	www.icm.csic.es/scimar/PDFs/ sm64n1111.pdf	Sci Mar 64 : 111–13
Holdich D et al.	The invasive Ponto-Caspian mysid, Hemimysis anomala, reaches the UK	2006	www.aquaticinvasions.ru/2006/AI_2006 _I_I_Holdich_etal.pdf	Aquatic Invasions 1:4–6
Hovel KA et al.	Planktivory as a selective force for reproductive synchrony and larval migration	1997	www.int-res.com/articles/meps/157/m157p079.pdf.	Mar Ecol-Prog Ser 157:79–9
ICES: International Council for the Exploration of the Sea	Report of the Working Group on Introductions and Transfers of Marine Organisms (WGITMO)	2007	www.ices.dk/reports/ACME/2007/ WGITMO07.pdf	ICES WGITMO Report 200
ICES: International Council for the Exploration of the Sea	ICES Working Group on Introductions and Transfers of Marine Organisms Report 200	2006	www.ices.dk/reports/ACME/2006/ WGITMO06.pdf	ICES CM 2006/ACME:05
IMO: International Marine Organizations	Alien invaders – putting a stop to the ballast water hitch-hikers	1999	http://72.14.253.104/search?q=cache: mevKlw5iG4MJ:www.imo.org/includes/ blastData.asp/doc_id%3D420/BALLAST 2520Alien%2520invaders%25201999.pdf Antithamnion+nipponicum&hl=en&ct= clnk&cd=23≷=us	
Inglis G et al.	Gulf Harbour Marina	2005	www.maf.govt.nz/mafnet/publications/biosecurity-technical-papers/2005-12-gulf-harbour-marina.pdf	Baseline survey for non- indigenous marine species (Research Project ZBS2000/04)
Inglis G et al.	Opua Marina – baseline survey for non- indigenous marine species (Research Project ZBS 2000/04)	2005	www.maf.govt.nz/mafnet/publications/ biosecurity-technical-papers/2005-14- opua-marina.pdf	Biosecurity New Zealand Technical Paper No: 2005/I
Inglis G et al.	Dunedin Harbour (Port Otago and Port Chalmers) – baseline survey for non- indigenous marine species (Research Project ZBS2000/4)	2005	www.maf.govt.nz/mafnet/publications/ biosecurity-technical-papers/2005-10- port-of-otago.pdf	Biosecurity New Zealand Technical Paper No: 2005/I
Inglis G et al.	Port of Lyttelton – baseline survey for non- indigenous marine species (Research Project ZBS2000/04)	2006	www.maf.govt.nz/mafnet/publications/ biosecurity-technical-papers/2005-01- port-of-lyttelton.pdf	Biosecurity New Zealand Technical Paper No: 2005/0
Janas U	Distribution and individual characteristics of the prawn <i>Palaemon elegans</i> (Crustacea, Decapoda) from the Gulf of Gdansk and the Dead Vistula River	2005	http://aliens.ocean.univ.gda.pl/obce/ Baltic_Aliens/Janas.pdf	Oceanological and Hydrobiological Studies XXXIV: 83–91
				(Continue

	reports			
Author	Title	Year	Website	ournal/report information
Jones JB and Franklin A	Monitoring and surveillance of non-radioactive contaminants in the aquatic environment and activities regulating the disposal of wastes at sea, 1995 and 1996	1998	www.cefas.co.uk/Publications/aquatic/ aemr5 I.pdf	Science Series: Aquatic Environment Monitoring Report No 5 I
Jørgensen LL and Sundet JH	Introduction, spread and potential impact of the recently introduced Red King Crab, <i>Paralithodes camtschaticus</i> , in coastal subarctic Norway	2003	www.sgnis.org/publicat/jorgsund.htm	Proceedings of the Third International Conference of Marine Bioinvasions; La Jol California; 2003 March 16–19
Karako S et al.	Asterina burtoni (Asteroidea; Echinodermata) in the Mediterranean and the Red Sea: does asexual reproduction facilitate colonization?	2002		Mar Ecol-Prog Ser 234 : 139–45
Katagan T et al.	An Indo-Pacific stomatopod from the Sea of Marmara: <i>Erugosquilla massavensis</i> (Kossmann, 1880)	2004		Crustaceana 77 : 381–83
Kennedy VS <i>et al</i> .	Maryland's oysters – research and management	1981	http://nsgd.gso.uri.edu/aqua/mdut 81003.pdf	Maryland Sea Grant – Publication No UM-SG-TS 81-04
Kenny R	Effects of temperature, salinity and substrate on distribution of <i>Clymenella torquata</i> (Leidy), Polychaeta	1969	http://links.jstor.org/sici?sici=0012- 9658%28196907%2950%3A4%3C624 %3AEOTSAS%3E2.0.CO%3B2-0	Ecology 50 : 624–31
Kideys AE et al.	Prelimlinary report: laboratory studies on the Beroe ovata and Mnemiopsis leidi in the Caspian Sea Water	2002	www.caspianenvironment.org/ mnemiopsis/mnemmenu6.htm	Caspian Environment Program
Kim M-S et al.	Recent introduction of <i>Polysiphonia morrowii</i> (Ceramiales, Rhodophyta) to Punta Arenas, Chile	2004		Bot Mar 47 : 389–94
Knight-Jones et al.	Sabelliform polychaetes, mostly from Turkey's Aegean coast	1991		J of Nat Hist 25 : 837–55
Kornfield IL et al.	Likely pre-Suez occurrence of a Red Sea fish (Aphanius dispar) in the Mediterranean	1976	www.nature.com/nature/journal/ v264/n5583/abs/264289a0.html	Nature 264 : 289–91
Kozhova OM et al.	Spread of Elodea canadensis in Lake Baikal	2004		Hydrobiologia 259 : 203–11
Krakae M et al.	Native parasites adopt introduced bivalves of the North Sea	2006		Biol Invasions 8:919–25
Kufel L	Chara beds acting as nutrient sinks in shallow lakes – a review	2002		Aquat Bot 72 : 249–60
Lavie B et <i>al</i> .	Genetic diversity of marine gastropods: contrasting strategies of <i>Cerithium rupestre</i> and <i>C scabridum</i> in the Mediterranean Sea	1986		Mar Ecol-Prog Ser 28: 99–103
Leone D	Sponge threatens coral in bay	2005	http://starbulletin.com/2005/12/10/ news/story03.html	Star Bulletin I 0 (44)
Levin LA	Drift tube studies of bay-ocean water exchange and implications for larval dispersal	1983		Estuaries 6 : 364–71
Ligal MZ et <i>al</i> .	Bioaccumulation of some heavy metals (Cd, Fe, Zn, Cu) in two bivalvia species (<i>Pinctada radiata</i> , Leach 1814 and <i>Brachidontes pharaonis</i> Fischer, 1870)	2005		Turk J Vet Anim Sci 29 : 89–9
Lilly EL et al.	Paralytic shellfish poisoning toxins in France linked to human-introduced strain of Alexandrium catenella from western Pacific: evidence from DNA and toxin analysis	2002		J Plankton Res 24 : 443–52

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Articles and Author Lim PT et al.	Title First report of Alexandrium taylori and Alexandrium peruvianum (Dinophyceae) in	Year		
	First report of Alexandrium taylori and Alexandrium peruvianum (Dinophyceae) in	Year		
Lim PT et al.	Alexandrium peruvianum (Dinophyceae) in		Website	Journal/report information
	Malaysian waters	2005		Harmful Algae 4: 391–400
Littler DS et al.	Report: Bonaire National Marine Park – algal survey and inventory	2006	www.mina.vomil.an/welcome/islands/downloads/Bonairealgalsurveyreport.pdf	:
Lopez V and Krauss U	National and regional capacities and experiences on marine invasive species, including ballast waters, management programmes in the wider Caribbean Region: a compilation of current information	2006	www.cep.unep.org/newsandevents news/2006/report-on-marine-invasive species/	UNEP Caribbean Environment Programme Report on Marine Invasive Species
Lotan A et al.	Synchronization of the life cycle and dispersal pattern of the tropical invader scyphomedusan <i>Rhopilema nomadica</i> is temperature dependent	1994	www.int-res.com/articles/meps/109/m 109p059.pdf	Mar Ecol-Prog Ser 109 59–65
Maldonado M et al.	Effects of physcial factors on larval behavior, settlement and recruitment of four tropical demosponges	1996	www.int-res.com/articles/meps/138/m 138p169.pdf	Mar Ecol-Prog Ser 138: 169–80
Martel C et al.	Invasion of the marine gastropod Ocinebrellus inornatus on the French Atlantic coast	2004		Mar Ecol-Prog Ser 273 : 163–72
Martin A et al.	The fauna of anfipodos (Crustacea:Amphipoda) of coastal waters of the eastern region of Venezuela	2003		Bulletin, Spanish Institute of Oceanography 1: 327–44
Martin G et al.	Recent changes in distribution pattern of introduced charophyte species <i>Chara Connivens</i> in Estonian coastal waters of the Baltic Sea	2003	www.sgmeet.com/mb/viewabstract2 asp?AbstractID=136&SessionID=28	Poster Abstract: Third International Conference Marine Bioinvasions
Mastitsky SE et al.	The gravel snail, <i>Lilthoglyphus naticoides</i> (Gastropoda:Hydrobiidae), a new Ponto-Caspian species in Lake Lukomskoe (Belarus)	2006	www.aquaticinvasions.ru/2006/AI_2006 _I_3_Mastitsky_Samoilenko.pdf	Aquatic Invasions 1:161–70
Mavruk S et al.	Non-native fishes in the Mediterranean from the Red Sea, by way of the Suez Canal	2007	www.springerlink.com/content/462t52 I t02lw8532/?p=e67e9b I bd2a64d22 abacae9ab50e8a45π=3	Reviews in Fish Biology and Fisheries (early online publication)
Maximov AA et al.	Invasion by oligochaete <i>Tubificoides</i> pseudogaster alters soft-bottom community structure and function in the eastern Gulf of Finland	2006	www.msi.ttu.ee/files/0/GoFSeminar 2006Abstracts.pdf	Gulf of Finland Seminar – Abstracts
McGann M et al.	Invasion by a Japanese marine microorganism in western North America	2000		Hydrobiologia 42 I : 25–30
McGann M et al.	Arrival and expansion of the invasive foraminifer <i>Trochammina hadai</i> Uchio in Padilla Bay, Washington: a new geologic datum	2007	gsa.confex.com/gsa/2007CD/final program/abstract_121069.htm	Cordilleran Section – 103 Annual Meeting; 2007 May 4–6
Metropolitan Wastewater Dept – Ocean Monitoring Program	An ecological assessment of San Diego Bay: a component of the Bight '98 regional survey	2003	www.swrcb.ca.gov/rwqcb9/programs/ baycleanup/SDBay%20Report.pdf	City of San Diego, Californ
Miller AW	Assessing the importance of biological attributes for invasion success: eastern oyster (<i>Crassostrea virginica</i>) introductions and associated molluscan invasions of Pacific and Atlantic coastal systems	2000	http://magpiedesign.com/miller/ documents/MilllerAW2000 Dissertation.pdf	
				(Continu

WebPanel 3. Marine data sources in database – Continued				
Articles and reports				
Author	Title	Year	Website	Journal/report information
Mills CE et al.	Invertebrate introductions in marine habitats: two species of hydromedusae (Cnidaria) native to the Black Sea, Maeotias inexspectata and Blackfordia virginica, invade San Francisco Bay	1995		Mar Biol I 22 : 279–88
Mito T et al.	Invasive alien species in Japan: the status quo and the new regulation for prevention of their adverse effects	2004	www.airies.or.jp/publication/ger/ pdf/08-02-08.pdf	Global Environmental Research 8 : 171–91
Monti M et al.	First record of Ostreopsis cfr Ovata on macroalgae in the Northern Adriatic Sea	2007		Mar Pollut Bull 5 4 : 598–601
Morello EB et al.	The alien bivalve Anadara demiri (Arcidae): a new invader of the Adriatic Sea, Italy	2004	http://journals.cambridge.org.offcampus.ib.washington.edu/download.php?file=%2FMBI%2FMBI84_05%2FS0025315404010410a.pdf&code=41a99853006ac144ef0a6e06d5ccf9fa	J Mar Biol Ass UK 84 : 1057–64
Morton B	The marine flora and fauna of Hong Kong and Southern China V	2001		
Nguyen-Ngoc L	An autecological study of the potentially toxic dinoflagellate Alexandrium affine isolated from Vietnamese waters	2004		Harmful Algae 3: 117–29
Ni Chualain F et <i>al</i> .	The invasive genus Asparagopsis (Bonnemaisoniacea, Rhodophyta): molecular systematics, morphology, and ecophysiology of Falkenbergia isolates	2004		J Phycol 40 : 1112–26
NOAA	Invasive marine species found on Georges Bank	2003	www.noaanews.noaa.gov/stories2003/s2125.htm	NOAA Magazine
Novosel M et al.	Ecology of an anchialine cave in the Adriatic Sea with special reference to its thermal regime	2007		Mar Ecol 28 : 3–9
Ojaveer H et al.	Ecological impact of Ponto-Caspian invaders in the Baltic Sea, European inland waters and the Great Lakes: an inter-ecosystem comparison	2002	www.biomareweb.org/downloads/ ojaveer.pdf	In: Leppäkoski E et al. 2002. Invasive aquatic species of Europe: distribution, impact and management
Özcan T et al.	The first record of the banana prawn Fenneropenaeus merguiensis (De Man, 1888) (Crustacea: Decapoda: Penaeidae) from the Mediterranean Sea	2006	www.aquaticinvasions.ru/2006/AI_ 2006_I_4_Ozcan_etal.pdf	Aquatic Invasions 1:286–88
Ozturk B et al.	Indo-Pacific gastropod species in the Levantine and Aegean Seas	2006	http://aquaticinvasions.ru/2006/AI_ 2006_I_3_Ozturk_Can.pdf	Aquatic Invasions 1:124–29
Pais A et al.	Westward range expansion of the Lessepsian migrant Fistularia commersonii (Fistulariidae) in the Mediterranean Sea, with notes on its parasites	2007		J Fish Biol 7 0 : 269–77
Pallaoro A et al.	First record of the <i>Sphyraena chrysotaenia</i> (Klunzinger, 1884) (Pisces, Sphyraenidae) from the Adriatic Sea	2001		J Fish Biol 59 : 179–82
Pancucci- Papadopoulou MA	Update of marine alien species in Hellenic waters	2005	http://elnais.ath.hcmr.gr/PDF/Update% 20of%20marine%20alien%20species %20in%20Hellenic%20waters.pdf	Medit Mar Sci 6
Pannell A	Treatment methods used to manage Didemnum vexillum in New Zealand	2007		
				(Continue

WebPanel 3. Marine data sources in database – Continued				
Articles and	reports			
Author	Title	Year	Website	Journal/report information
Mills CE et al.	Invertebrate introductions in marine habitats: two species of hydromedusae (Cnidaria) native to the Black Sea, Maeotias inexspectata and Blackfordia virginica, invade San Francisco Bay	1995		Mar Biol I 22 : 279–88
Parry GD and Cohen B	Exotic species established in Western Port, including an assessment of the status of the exotic species Corbula gibba, Alexandrium spp, Gymnodinium spp and Undaria pinnatifida	2001	http://72.14.253.104/search?q=cache:A-9iBCN_nBYJ:www.land.vic.gov.au/DSE/nrencm.nsf/646e9b4bba1afb2bca256c 420053b5ce/7ae83a588d2ce75eca256e 670017e6b0/%24FILE/report45.pdf+ Alexandrium+peruvianum&hl=en&ct=clnk&cd=11≷=us	
Paula AF et al.	Spatial distribution and abundance of non- indigenous coral genus <i>Tubastraea</i> (Cnidaria, Scleractinia) around Ilha Grande, Brazil	2005	www.scielo.br/pdf/bjb/v65n4/a14v 65n4.pdf	Braz J Biol 65 : 661–73
Penna A et al.	Alexandrium catenella (Dinophyceae), a toxic ribotype expanding in the NW Mediterranean Sea	2005		Mar Biol I 48 : I2–23
Piazzi L et <i>al</i> .	Spread of alien macroalgal species along the Tuscany coasts	2000	http://flux.ve.ismar.cnr.it/igbp/ proceeding2000/GLOBEC.pdf	Global Ocean Ecosystem Dynamics (GLOBEC) – Characteristics of and variations in the Mediterranean marine ecosystem
Pierre MADL and Maricela YIP	Literature review of Caulerpa taxifolia	2005	www.sbg.ac.at/ipk/avstudio/pierofun/ct/ caulerpa.htm	Contribution for the 31st BUFUS Newsletter, University of Salzburg – Molecular Biology, Salzbu Austria
Pipitone C et al.	Contribution to the knowledge of <i>Percnon gibbesi</i> (Decapoda, Grapsidae), an exotic species spreading rapidly in Sicilian waters	2001		Crustac Int J Crustac Res 74: 1009–17
Pollard DA et al.	Report on Port Kembla introduced marine pest species survey	2002	www.dpi.nsw.gov.au/data/assets/pdf _file/137166/output-41.pdf	NSW Fisheries Final Report Series 41
Psomadakis PN et al.	Additional record of Sphoeroides pachygaster (Pisces:Tetraodontidae) in the Tyrrhenian Sea and notes on the distribution of the species in the Mediterranean	2006	www.mba.ac.uk/jmba/pdf/5186.pdf	JMBA2 – Biodiversity Records
Rahimian H et al.	Pseudobacciger harengulae from the Atlantic herring Clupea harengus: a new host and locality record	2003		J Helminthol 77 : 69–75
Ray GL	Invasive marine and estuarine animals of the south Atlantic and Puerto Rico	2005	http://el.erdc.usace.army.mil/elpubs/ pdf/ansrp05-5.pdf	US Army ERDCenter Report: ERDC/TN ANSR 05-5
Ray GL	Invasive marine and estuarine animals of the Gulf of Mexico	2005	http://el.erdc.usace.army.mil/elpubs/ pdf/ansrp05-4.pdf	ANSRP Technical Notes Collection (ERDC/TN ANSRP-05-4)
Rees JT et al.	Non-indigenous hydromedusae in California's upper San Francisco Estuary: life cycles, distribution, and potential environmental impacts*	2000	www.icm.csic.es/scimar/PDFs/sm64s 1073.pdf	Sci Mar 64 : 73–86
Rhodes LL et al.	Coolia monotis (Dinophyceae): a toxic epiphytic microalgal species found in New Zealand (Note)	1997		NZ J Mar Freshwat Res 3 I 139–41
				(Contin

WebPanel 3. Marine data sources in database – Continued Articles and reports				
Rodionova NV and Panov VE	Establishment of the Ponto-Caspian predatory cladoceran <i>Evadne anonyx</i> in the eastern Gulf of Finland, Baltic Sea	2006	www.aquaticinvasions.ru/2006/Al_ 2006_I_I_Rodionova_Panov.pdf	Aquatic Invasions 1:7–12
Rojas-Gonzalez B et al.	Notes on <i>Rhodomelaceae</i> (Rhodophyta) from the Canary Islands: observations on reproductive morphology and new records	2000	www.atypon-link.com/WDG/doi/pdf/ 10.1515/BOT.2000.015	Bot Mar 43 : 147–55
Rolbiecki L	The first record of parasites in <i>Gammarus</i> tigrinus Sexton, 1939 – a recent newcomer to the Gulf of Gdansk	2005		Oceanologia 47 : 283–87
Ruesink J et al.	Demographic comparisons and control strategies for high- and low-impact invaders	2004	http://abstracts.co.allenpress.com/ pweb/esa2004/document/?ID=38451	2004 ESA Annual Meeting Abstract
Ruitton S et al.	First assessment of the <i>Caulerpa racemosa</i> (Caulerpales, Chlorophyta) invasion along the French Mediterranean coast	2005	www.unice.fr/LEML/Pages/Pub_LEML/ Ruitton_etal_2005.pdf	Mar Pollut Bull 50 : 1061–68
Ruiz GM	Invasion of coastal marine communities in North America: apparent patterns, processes, and biases	2000		Annu Rev Ecol Syst 3 1: 481–531
Russell DJ et al.	Host utilization during ontogeny by two pycnogonid species (Tanystylum duospinum and Ammothea hilgendorfi) on the hydroid Eucopella everta (Coelenterata: Campanulariidae)	1990	http://viticulture-enology.org/09/48/ 094880.html	Bijdr Dierkd 60 : 215–24
Russev vBK	Influence of some ecological factors on changes of the standing crop of zoobenthos of the Danube in the Bulgarian stretch	1972	www.iad.gs/content/library/artikel/ artikel6.php?PHPSESSID=a67e9c 66f51a1f0178dd34112743887f	Proceedings of the IBP-UNESCO Symposium
Sanson M et al.	Sublittoral and deep-water red and brown algae new from the Canary Islands	2002		Bot Mar 45 : 35–49
Sartoni G et al.	A survey of the marine algae of Milos Island, Greece	1999		Cryptogamie:Algol 20: 271–83
Schramm W and Nienhuis PH	Marine benthic vegetation: recent changes and the effects of eutrophication	1996		
Schwartz FJ	Tail spine characteristics of stingrays (order <i>Myliobatiform</i> es) found in the northeast Atlantic, Mediterranean, and Black Seas	2005	http://ichthyology.tau.ac.il/2005/ Stingray.pdf	Electronic Journal of Ichthyology 1: 1–9
Seehagen A et al.	The interspecific competition between Carcinus maenas (Linnaeus 1758) and Hemigrapsus penicillatus (De Haan 1835), a potential invader into German coastal waters	2001	www.sgnis.org/publicat/cmb57.htm	Proceedings of the Second International Conference on Marine Bioinvasions; New Orleans, LA; 2001 April 9–11
Sei S	First report of the occurrence of Acartia tonsa (Copepoda:Calanoida) in the Lesina lagoon (south Adriatic Sea–Mediterranean Sea)	2006	www.mba.ac.uk/jmba/pdf/5391.pdf	JMBA2 – Biodiversity Records
Selina MS et al.	First records of dinoflagellates Alexandrium margalefi Balech, 1994 and A tamutum Montresor, Beran et Jon, 2004 in the seas of the Russian Far East	2005		Russian Journal of Marine Biology 3 1 : 187–91
Sezgin M et al.	New record of a Lessepsian amphipod from the Levantine coast of Turkey: Elasmopsus pectenicrus (Bate 1862)	2007		Crustaceana 80 : 247–51
Shluker AD	State of Hawaii Aquatic Invasive Species Management Plan	2003	www.hawaii.gov/dlnr/dar/pubs/ais_ mgmt_plan_final.pdf	
				(Continued)

Articles and reports				
Author	Title	Year	Website	 ournal/report information
Simon-Bouhet B et al.	Multiple introductions promote range expansion of the mollusc <i>Cyclope neritea</i> (Nassariidae) in France: evidence from mitochondrial sequence data	2006		Mol Ecol 15 :1699–1711
Smayda T	Harmful algal bloom communities in Scottish coastal waters: relationship to fish farming and regional comparisons – a review: paper 2006/3	2006	www.scottishexecutive.gov.uk/ Publications/2006/02/03095327/10	Scottish Executive Publications
Stafford H et al.	Port of Thursday Island – baseline survey for introduced marine pests	2004	www.rrrc.org.au/publications/ downloads/Port-of-Thurs-Island- Baseline-Surveys-Final-300506.pdf	Final Report of the March 2004 Port-Wide Field Survey
Steele S et al.	Impact of the copepod Mytilicola orientalis on the Pacific oyster Crassotrea gigas in Ireland	2001		Dis Aquat Org 47 : 145–49
Stimson J et al.	Effects of herbivory, nutrient levels, and introduced algae on the distribution and abundance of the invasive macroalga Dictyosphaeria cavernosa in Kaneohe Bay, Hawaii	2001		Coral Reefs 19 : 343–57
Streftaris N et al.	Globalization in marine ecosystems: the story of non-indigenous marine species across European seas	2005	www.nobanis.org/files/Streftaris%20et %20al%202005.pdf	Oceanogr Mar Biol Annu Rev 43 : 419–53
Streftaris N et al.	Alien marine species in the Mediterranean – the 100 "worst invasives" and their impact	2006	www.sesame-ip.eu/doc/Streftaris_and_ Zenetos_2006_100_Worst_Invasive_ species_in_Mediterranean.pdf	Medit Mar Sci 7 :87–118
Svavarason J	Does the wood-borer Sphaeroma terebrans (Crustacea) shape the distribution of the mangrove Rhizophora mucronata?	2002	http://wiomsa.org/pub/downloadfile. asp?fid=4 I	Ambio 3 I : 574–79
Talley TS et al.	Habitat utilization and alteration by the invasive burrowing isopod, <i>Sphaeroma quoyanum</i> , in California salt marshes	2001	http://levin.ucsd.edu/research/ Sphaeroma.pdf	Mar Biol 138 : 561–73
Taskin E et al.	First report of <i>Microspongium globosum</i> Reinke (Phaeophyceae, Myrionemataceae) in the Mediterranean Sea	2006		Nova Hedwigia 82 : 135–42
Terranova S et al.	Population structure of <i>Brachidontes pharaonis</i> (P Fisher, 1870) (Bivalvia, Mytilidae) in the Mediterranean Sea, and evolution of a novel mtDNA polymorphism	2006		Mar Biol I 50 : 89–101
Thessalou-Legaki et al.	The establishment of the invasive crab <i>Percnon gibbesi</i> (H Milne Edwards, 1853) (Crustacea: Decapoda: Grapsidae) in Greek waters	2006	www.aquaticinvasions.ru/2006/Al_2006_I_3_Thessalou_etal.pdf	Aquatic Invasions 1:133–36
Torchin ME et al.	Parasites and marine invasions	2002		Parasitology I 24 : I 37–5 I
Torchin ME et al.	The introduced ribbed mussel (Geukensia demissa) in Estero de Punta Banda, Mexico: interactions with the native cord grass, Spartina foliosa	2005		Biol Invasions 7: 607–14
Torcu H	Lessepsian fishes spreading along the coasts of the Mediterranean and the southern Aegean Sea of Turkey	2000		Turk J Zool 24 : 139–48
Troup C	Marine invaders	2007	www.TeAra.govt.nz/EarthSeaAndSky/ OceanStudyAndConservation/ MarineInvaders/en	Te Ara - the encyclopedia New Zealand

Articles and	reports			
Author	Title	Year	Website	ournal/report information
Tsai ML et al.	Desiccation resistance of two semiterrestrial isopods, Ligia exotica and Ligia taiwanensis (Crustacea) in Taiwan	1998	Trebsice .	Comp Biochem Physiol A Mol Integr Physiol I 19: 361–67
Tsai ML et al.	Life history plasticity and reproductive strategy enabling the invasion of <i>Ligia exotica</i> (Crustacea: Isopoda) from the littoral zone to an inland creek	2001	www.int-res.com/articles/meps/210/ m210p175.pdf	Mar Ecol-Prog Ser 210 : 175–84
Tsirika A et al.	A survey of the benthic flora in the National Marine Park of Zakynthos (Greece)	2005	http://elnais.ath.hcmr.gr/PDF/Tsirika- Haritonidis_2005.pdf	Bot Mar 48 : 38–45
Vanden Bossche J-P et <i>al</i> .	First record of the Pontocaspian invader Hypania invalida (Grube, 1860) (Polychaeta: Ampharetidae) in the River Meuse (Belgium)	2001	www.naturalsciences.be/institute/ associations/rbzs_website/bjz/back/ pdf/BJZ%20131(2)/Volume%20131 (2),%20pp.%20183-185.pdf	Belgian J Zool I 3 I : 183–85
Verslyckel T <i>et al.</i>	First occurrence of the Pontocaspian invader Hemimysisanomala (Sars, 1907) in Belgium (Crustacea: Mysidacea)	2000	www.whoi.edu/cms/files/tverslycke/2005/1/First_occurrence_of_the_Pontocaspian_invader_Hemimysis_anomala_(SARS,_1907)_in_Belgium_(Crustacea,_Mysidacea)BJZ2000_1041.pdf	Belgian J Zool I 3 0 : I57–58
Voultsiadou E	Demosponge distribution in the eastern Mediterranean: a NW–SE gradient	2005		Helgol Mar Res 59 : 237–51
Wallentinus I et al.	Introduced marine organisms as habitat modifiers	2007		Mar Pollut Bull 55 : 323–32
Webber WR et al.	Life history studies on New Zealand Brachyura *5. Larvae of the family Majidae	1981	www.rsnz.org/publish/nzjmfr/1981/ 39.php	NZ J Mar Freshwat Res I 5: 331–83
Wisely B	Effects of antifouling paints on settling larvae of the bryozoan <i>Bugula neritina</i> L	1963		Aust J Mar Freshw Res 14: 44–59
Wittenberg R (Ed)	An inventory of alien species and their threat to biodiversity and economy of Switzerland	2005	www.nobanis.org/files/invasives%20in% 20CH.pdf	CABI Bioscience Switzerla Centre report to the Swis Agency for Environment, Forests and Landscape
WolffWJ	Non-indigenous marine and estuarine species in the Netherlands	2005	www.marbee.fmns.rug.nl/pdf/marbee/ 2005-Wolf-ZoolMed.pdf	Zool Med Leiden 79 :31
Woods Hole Oceanographic Institution US	Marine fouling and its prevention	1952	https://darchive.mblwhoilibrary.org/ bitstream/1912/191/18/chapter+10.pdf	Contribution No 580 from the Woods Hole Oceanographic Institute
Workman ML et al.	Introduced yellowfin goby, Acanthogobius flavimanus: diet and habitat use in the lower Mokelumne River, California	2007	http://repositories.cdlib.org/jmie/sfews/vol5/iss1/art1	San Francisco Estuary and Watershed Science 5 : Article I
Xu H et al.	The status and causes of alien species invasion in China	2006		Biodiversity Conserv 15: 2892–2904
Yamamoto M et al.	Draft priority species – freshwater and marine	2003	http://praise.manoa.hawaii.edu/news/ Priorityspecies_draft2.doc	State of Hawaii Aquatic Nuisance Species Plan
Yokes B et al.	Touchdown – first record of <i>Percnon gibbesi</i> (H Milne Edwards, 1853) (Crustacea: Decapoda: Grapsidae) from the Levantine coast	2006	www.aquaticinvasions.ru/2006/AI_2006 _I_3_Yokes_Galil.pdf	Aquatic Invasions 1:130–32
Zenetos A et al.	Origin and vectors of introduction of exotic molluscs in Greek waters	2005	www.naturalsciences.be/institute/ associations/rbzs_website/bjz/back/pdf/ BJZ%20135(2)/Volume%20135(2), %20pp.%20279-286.pdf	Belgian J Zool I 35 : 279–86
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Artic	les and	lrepo	rts
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Author	Title	Year	Website	Journal/report information
Zettler ML et al.	Distribution and population dynamics of Marenzelleria viridis (Polychaeta, Spionidae) in a coastal water of the southern Baltic	1995		Arch Fish Mar Res 42 : 209–24
Zhokhov AE et al.	Dispersal of invading trematodes <i>Nicolla</i> skrjabini (Iwanitzky, 1928) and <i>Plagioporus</i> skrjabini Kowal, 1951 (Trematoda: Opecoelidae) in the Volga	2006		Russ J Ecol 37 : 363–65

Other web resources

Title	Website
Alaska Invasive Species Working Group: Marine Subcommittee Audio Conference	www.uaf.edu/ces/aiswg/pdf-documents/MarineMinutes-5-30-06.pdf
Aquatic Nuisance Species: European Green Crab	http://wdfw.wa.gov/fish/ans/greencrab.htm
Aukland Museum	www.aucklandmuseum.com/
Australia identifies marine pest threats (2003 media release)	www.marine.csiro.au/media/03releases/14jul03b.htm
Australia's NSW Dept of Primary Industries: Factsheets	www.dpi.nsw.gov.au/fisheries
Avian Web: Canada Geese	www.avianweb.com/canadageese.html
Battle of the Black Sea Jellies	www.imagequest 3d.com/pages/general/news/blackseajellies/blackseajellies.htm
Centre for Aquatic Plant Management's Information Sheet 7: Canadian Waterweed	www.nerc-walling for d. ac. uk/research/capm/pdf% 20 files/7% 20 Canadian% 20 pondweed.pdf
Chesapeake Bay Program	www.chesapeakebay.net/index.cfm
Crustikon – Crustacean photographic website – Tromsø Museum – University of Tromsø (author: C d'Udekem d'Acoz)	$www.imv.uit.no/crustikon/Decapoda/Decapoda2/Species_index/Hemigrapsus_penicillatus.htm$
CSIRO's The Web-Based Rapid Response Toolbox	http://crimp.marine.csiro.au/NIMPIS/controls.htm
Dauphin Island Sea Lab's Dock Watch	http://dockwatch.disl.org/haveyouseen.htm
Defense scientists discover introduced marine species (2001 media release)	www.dsto.defence.gov.au/news/3308/
Ecoplan News Issue 58	www.naturebase.net/component/option,com_docman/task,doc_download/Itemid, 1075/gid,324/
Elkhorn Slough Research: Least Wanted Aquatic Invaders	www.elkhornslough.org/research/aquaticinvaders/aquatic0.htm
Examples of marine invasive species introduced via the shipping industry	www.ortepa.org/pages/ei19pt5.htm
Exotic Species of San Francisco Bay	www.exoticsguide.org/
FAO Fishery and Aquaculture country profile – Bolivia	$www.fao.org/fi/website/FIRetrieveAction.do?dom=countrysector\&xml=FI-CP_BO.xml$
FloraBase:Western Australia Flora	http://florabase.calm.wa.gov.au/
Gammarus tigrinus, a new species in the Gulf of Finland (Baltic Sea Portal)	www.itameriportaali.fi/en/tietoa/artikkelit/ihminen/en_GB/gammarus/
Government of Western Australia – Department of Fisheries	www.fish.wa.gov.au/index.php
	(Continued)

WebPanel 3. Marine data sources in database – Continued				
Other web resources				
Title	Website			
Gracilaria salicornia	http://downwindproductions.com/tours/streams/algae.html			
Greater Chicago Cichlid Association	www.gcca.net/index.htm			
Guide to Marine Invaders in the Gulf of Maine	www.mass.gov/czm/invasives/monitor/id.htm			
HELCOM (Helsinki Commission) 1/2005 Newsletter	http://helcom.navigo.fi/stc/files/Publications/Newsletters/newsletter_01_2005.pdf			
Hemigrapsus takanoi in the Eastern Scheldt	www.dochterland.org/hemigrapsus.htm			
Identifying Harmful Marine Dinoflagellates: Harmful Marine Dinoflagellate Taxa	www.nmnh.si.edu/botany/projects/dinoflag/taxa.htm#Ostreopsis			
Invasion of the Jellies: Unwelcome Visitors to the Black Sea	www.ocean.udel.edu/blacksea/chemistry/jellyfish.html			
Jax Shells (Jacksonville, FL)	www.jaxshells.org/			
ellies Zone	http://jellieszone.com/gonionemus.htm			
Marine invasive species at our door steps: Seychelles is taking early measures (author: Bijoux J)	www.mcss.sc/MCNEWS/MCNews_v2_2.htm			
Maryland DNR: Harmful Algal Blooms in Maryland	www.dnr.state.md.us/Bay/hab/prorocentrum.html			
MIT Sea Grant's Introduced and Cryptogenic Species of the North Atlantic	http://massbay.mit.edu/exoticspecies/exoticmaps/index.html			
MLPC – Hemimysis anomala, shrimp	http://blog.midwestlakes.org/06-12/hemimysis-anomala-shrimp.html			
Museo Di Storia Naturale – Di Venezia: Bursatella leachi	www.msn.ve.it/index.php?pagina=progamb_view&id=4&idprog=18			
NOAA NMFS – Southwest Regional Office	http://swr.nmfs.noaa.gov/Default.htm			
Non-indigenous aquatic species of concern for Alaska – Fact Sheets	www.pwsrcac.org/projects/NIS/factsheets.html			
Overview of the Conservation of Australian Marine Invertebrates (Report for Environment Australia 2002)	www.amonline.net.au/invertebrates/marine_overview/chapt6aa.html			
Poisonous Red Sea Pufferfish Reach Crete	www.cretegazette.com/2007-05/crete_lagocephalus_sceleratus.php			
Polysiphonia Ecology: Invasions (author: S Skikne)	www.mbari.org/staff/conn/botany/reds/Sarah/ecology-invasions.htm			
San Francisco Estuary Invasive Spartina Project	www.spartina.org/maps_findings.htm			
Seastar threat grows in southern Australia (1999 media release)	www.csiro. au/files/mediare lease/mrl 999/Seastar Threat Grows In Southern Australia. htm.			
Sierra Club Comments for the US Coral Reef Task Force – 10/24/06	www.coralreef.gov/taskforce/pdf/sierra_club_usvi.pdf			
Southern Ocean Amphipoda Checklist	www.naturalsciences.be/amphi/checklist.pdf			
Synopsis of Infectious Diseases and Parasites of Commercially Exploited Shellfish	www.pac.dfo-mpo.gc.ca/sci/shelldis/pages/morwoy_e.htm			
The Indian River Lagoon Species Inventory (Smithsonian Marine Station at Fort Pierce)	www.sms.si.edu/irLspec/index.htm			
UNEP-GRID Fact Sheet: Hemimysis anomala GO Sars, 1907	www.grid.unep.ch/bsein/redbook/txt/hemimysa.htm			
University of Michigan Museum of Zoology's Animal Diversity Web	http://animaldiversity.ummz.umich.edu/site/index.html			
University of Tartu: Benthic Invertebrates	www.sea.ee/Sektorid/merebioloogia/MASE/Benthic_invertebrates.htm (Continu			

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WebPanel 3. Marine data sources in database – Continued				
Other web resources				
Title	Website			
USGS's Florida Integrated Science Center – Gainesville	http://cars.er.usgs.gov/Nonindigenous_Species/nonindigenous_species.html			
USGS's Marine Nuisance Species	http://woodshole.er.usgs.gov/project-pages/stellwagen/didemnum/			
WA State Noxious Weed Control Board's Information about common cordgrass (Spartina anglica)	www.nwcb.wa.gov/weed_info/Written_findings/Spartina_anglica.html			
Weed Information Sheet: Hygrophila costata	www.portstephens.local-e.nsw.gov.au/files/46654/File/Hygrophila_info_sheet.pdf			
Why do jellyfish sting? (author: B Galil)	www.ocean.org.il/Eng/Focus/Jellyfish.asp			