

Bioinvasion and Global Environmental Governance: The Transnational Policy Network on Invasive Alien Species

Russia's Action on IAS

Description

Russia, or the Russian Federation, is a country extending over much of northern Eurasia (Europe and Asia together). It is a semi-presidential republic comprising 83 federal subjects. Russia shares land borders with the following countries (counterclockwise from northwest to southeast): Norway, Finland, Estonia, Latvia, Lithuania, Poland, Belarus, Ukraine, Georgia, Azerbaijan, Kazakhstan, China, Mongolia and the Democratic People's Republic of Korea. At 17,075,400 square kilometres (6,592,800 sq mi), Russia is by far the largest country in the world, covering more than an eighth of the Earth's land area; it has a population of about 140 million people.

Russia established worldwide power and influence from the times of the Russian Empire to being the largest and leading constituent of the Soviet Union, the world's first and largest constitutionally socialist state and a recognized superpower. Russia ended 2008 with GDP growth of 6.0%, following 10 straight years of growth averaging 7% annually since the financial crisis of 1998. Over the last six years, fixed capital investment growth and personal income growth have averaged above 10%, but both grew at slower rates in 2008. Growth in 2008 was driven largely by non-tradable services and domestic manufacturing, rather than exports. Russia is a permanent member of the United Nations Security Council, a member of the G8, APEC and the SCO, and is a leading member of the Commonwealth of Independent States.

Overview of Biodiversity

The ecosystems of Russia include polar deserts, tundra, forest tundra, taiga, mixed and broad-leaved forests, forest steppe, steppe, and semi-desert. Russian forests account for about 22% of the world's forest resources and 40% of the most valuable coniferous stands. It also possesses the largest wetland systems in the world, with lakes and wetlands, connected by 120 thousand rivers, covering 15% of the territory.

- [CBD Country Profile](#)
- [Earth Trends Country Profile on Biodiversity and Protected Areas](#)
- [BioDat](#) (Russian biodiversity site)

Legislation relating to IAS

- [Russian Federation Forest Code](#)

Government Agencies/Departments/Ministries dealing with IAS⁴

- [Ministry of Natural Resources](#) (in Russian)
- [Ministry of Agriculture of Russia](#), (in Russian)
- [Federal Agency for Fisheries](#), (in Russian)

- [Federal Agency for Forestry](#), (in Russian)
- [Federal Service for Veterinary and phytosanitary supervision](#), (in Russian)
- [Federal Service for Control over trafficking of narcotic drugs and psychotropic substances](#) (in Russian)

Major Invasive Alien Species³

Agrilus planipennis (insect)	Mnemiopsis leidyi (comb jelly)
Ambrosia artemisiifolia (herb)	Myocastor coypus (mammal)
Castor canadensis (mammal)	Mytilopsis leucophaeata (mollusc)
Cercopagis pengoi (crustacean)	Ricinus communis (tree, shrub)
Centaurea solstitialis (herb)	Salmo trutta (fish)
Cryphonectria parasitica (fungus)	Tilapia zillii (fish)
Dreissena bugensis (mollusc)	Tradescantia fluminensis (herb)
Eichhornia crassipes (aquatic plant)	Vibrio cholerae (micro-organism)

Native Species Exported/Introduced to Non-Native Environments³

Acanthogobius flavimanus (fish)	Lotus corniculatus (herb)
Acer ginnala (tree)	Melilotus alba (herb)
Agrilus planipennis (insect)	Musculista senhousia (mollusc)
Aristichthys nobilis (fish)	Onopordum acanthium (herb)
Brassica elongata (herb)	Passer domesticus (bird)
Bythotrephes longimanus (crustacean)	Perca fluviatilis (fish)
Celastrus orbiculatus (vine, climber)	Populus alba (tree)
Corbicula fluminea (mollusc)	Sagina procumbens (herb)
Cotinus coggygria (tree, shrub)	Salsola tragus (shrub)
Ctenopharyngodon idella (fish)	Scardinius erythrophthalmus (fish)
Dendrolimus sibiricus (insect)	Streptopelia decaocto (bird)
Elaeagnus angustifolia (tree, shrub)	Styela clava (tunicate)
Hypericum perforatum (herb)	Tetropium fuscum (insect)
Ips typographus (insect)	Tomicus piniperda (insect)

Table 1 Actions to prevent, detect and manage IAS categorized into three themes: biodiversity, human health, and economic

Note: Actions (such as projects, publications and programs) are classified according to the most obvious theme but may also fit into the dimensions of another.

Theme	Action
Biodiversity	<ul style="list-style-type: none"> • The National Biodiversity Strategy and Action Plan (part 2) states that methods of conservation includes monitoring and management of spontaneous dispersal and acclimatization of alien species. The main task is to prevent the introduction of invasive species; to remove such species from a biocenosis and restore its original structure where feasible. • Biodiversity Clearing House Web Page (no information about

	<p>invasive species)</p> <ul style="list-style-type: none"> • The regulation on the Federal Supervisory Natural Resources Management Service states they have jurisdiction over conservation of forest resources and living resources and the control of Lake Baikal conservation. • The Regulation on the Federal Water Resources Facility states they have jurisdiction over the conservation and restoration of water bodies. • By different estimations of experts, there are about 500 alien plants and animals species and of the 380 freshwater fish about 120 are found outside its historic range.⁴ • A key aspect of the control of invasive alien species is government and academic organizations research. In Russia, an assessment to identify ways and vectors of introduction of alien species is underway, including:⁴ <ul style="list-style-type: none"> - the waterways of the spread of organisms from the Black Sea and Caspian Sea via the Volga River in the Baltic Sea (Research Institute of Biology of Inland Waters, Russian Academy of Sciences, Zoological Institute, Russian Academy of Sciences) - the path of penetration of quarantine species of insects (of the Institute of Plant Quarantine); - by vectors of introductions adventives plants (Botanical Institute, Russian Academy of Sciences, Institute of Crop RAAS, the Institute of Geography, Russian Academy of Sciences);⁴ • Efforts to prevent the introduction, control and elimination of invasive alien species to biodiversity involve many academic and industrial research institutes.⁴ • As part of Federal Scientific and Technical Program «Research and development on priority directions of development of science and technology» (in 2002-2006) the issue of creating a forecast of the impacts on the biosphere of alien species and genetically modified organisms, was executed by the Institute of Ecology and Evolution, Russian Academy of Sciences, Zoological Institute, Russian Academy of Sciences, Institute of Geography, Russian Academy of Sciences and industry institutions.⁴
Human health	<ul style="list-style-type: none"> • In 2002, the All-Russia Conference on Environmental Security held a round table «Ecological safety and invasion of alien species», attended by more than 50 professionals from 15 agencies of the executive authorities, academic and industrial research institutions, educational institutions, non-governmental organizations which outlined the necessary steps to prevent the introduction, the uncontrolled breeding and invasion of alien species.⁴
Economic	<ul style="list-style-type: none"> • Many alien species have a negative economically impact, and are included on the Russian National List of Quarantine Organisms such as 10 weeds, which are presented excluded, and 8 invasive insects

	<p>species.⁴</p> <ul style="list-style-type: none"> • Special comprehensive state policy in relation to alien species is in a formative stage. At the same time, the problem of control of alien species are increasingly being considered as part of the environmental security of the country. In accordance with the Convention on the protection of plants, the Federal Law «On Plant Quarantine», Regulation of import and export of agricultural products and standards in the field of export / import timber controls, protection and monitoring of alien species of economic importance.⁴ • The Institute of Plant Quarantine Branch is conducting a phytosanitary quarantine scientific investigation to support public authorities in this field.⁴ • Activities to prevent uncontrolled breeding of economically important alien species are carried out on agricultural lands, forests, and fisheries. Measure to prevent unintended release of invasive species through ballast waters discharges in the Black Sea and Azov Sea (<i>Mnemiopsis leidyi</i>) are underway.⁴ • Until recently in Russia the estimation of risks of invasive alien species into natural habitats was carried out only for economically significance:⁴ <ul style="list-style-type: none"> - Quarantine species that are capable of harming agricultural crops (weeds, wreckers, messengers of illnesses); - Quarantine species that will provide real harm to forestry (wood ecologically impeding the growth of native species, pests, diseases); - Certain types of fish-eating birds and mammals that were deliberate introduced in the 1930ies to 50ies; - Certain types of fishes and invertebrates (marine and freshwater) that were intentional introduced in the twentieth century; - Certain types of fish and invertebrates (marine and freshwater) that were unintentional introduced and have a negative impact on natural ecosystems and creating high economic losses.⁴
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Table 2 Action on IAS in cooperation with other countries

Agreement/ Organization	Countries/ Member	Action
Caspian Sea Biodiversity Strategy and Action Plan	Caspian Environmental Program, Caspian Regional Thematic Centre (CRTC) Regional Reports, the Caspian	<p>INTERVENTION: 1. Manage the introduction and spread of alien species</p> <p>ACTIVITIES</p> <p>1. Establish a regional centre to oversee the control of alien species</p> <p>- staffing, specific roles, terms of reference, location, funding, communications, etc</p> <p>2. Formulate a work programme for the regional</p>

	<p>Transboundary Diagnostic Analysis, and the National Caspian Action Plans (NCAPs) for the 5 littoral states (Azerbaijan, Russia Federation, Kazakhstan, Turkmenistan, and Islamic Republic of Iran)</p>	<p>centre, to include accidental and planned introductions</p> <ul style="list-style-type: none"> - assess current situation, carry out consultation, draft document, assess funding needs, agree programme <p>3. Provide adequate equipment and training to staff of the regional centre</p> <ul style="list-style-type: none"> - assess training and equipment needs, funding sources, installation and maintenance, design training course, hire consultants, conduct training, etc <p>4. Establish a network of national alien species control centres</p> <ul style="list-style-type: none"> -for sharing information, sharing of control-management approaches, workshops, etc <p>5. Develop a Protocol on the Control of Invasive Species</p> <ul style="list-style-type: none"> - develop draft Protocol specifying national responsibilities for control of invasive species, perform consultation on the draft Protocol , etc <p>6. Put in place national legislation for the enactment of the Protocol on Invasive Species to address alien introductions</p> <ul style="list-style-type: none"> - build capacity of legal understanding, knowledge and experience (design and set up training courses, hire training consultants, conduct training etc) - put draft Protocol through national legislation processes <p>7. Once Protocol is approved, develop enabling Guidelines for the implementation of the Protocol</p> <p>8. Implementation of the Protocol</p> <ul style="list-style-type: none"> - creation of task groups, working with sectors, monitoring results, etc <p>9. Apply controls on the disposal of ballast water from ships by the construction of a reception facility at Astrakhan</p> <ul style="list-style-type: none"> - research best practice in ballast water separation, design and construct a facility, training of staff, specialist equipment, etc <p>INTERVENTION: 2. To decrease population of <i>Mnemiopsis</i> and its influence on ecosystem of Caspian Sea.</p> <p>ACTIVITIES</p> <p>1. Develop a regional strategy for addressing the invasion of <i>Mnemiopsis</i></p> <ul style="list-style-type: none"> - consultation of relevant specialists, share best
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		<p>practices from other seas, draft and agree a regional strategy, etc</p> <p>2. Establish a regional monitoring programme to assess status and population trends in <i>Mnemiopsis</i></p> <p>- develop regional indicators, develop regional protocols, undertake training in monitoring techniques, evaluate results and report publicly, etc</p> <p>3. Conduct research into the biology of <i>Mnemiopsis</i> (applying results from other Regional Seas programmes)</p> <p>- put together research team, collate existing information, carry out new research where required, publish, etc</p> <p>4. Examine, assess and select options for the biological control of <i>Mnemiopsis</i></p> <p>5. Testing of the effect and impact of the controlled introduction of <i>Beroe ovata</i> through pilot projects (ie EIA)</p> <p>- set up pilot projects, monitor and report on pilot studies, etc</p> <p>Invasive Species component includes:</p> <ul style="list-style-type: none"> • Establishment of a system to control/prevent the introduction of exotic species – ballast water control; intergovernmental body on introductions; protocol development; and regional strategy on invasives. <p>The total for these activities is given as US\$ 2 Million</p>
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References

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