Code of Conduct for Invasive Alien Trees

Giuseppe Brundu & David M. Richardson

Department of Agriculture, University of Sassari, Italy

Centre for Invasion Biology, Department of Botany & Zoology, Stellenbosch University, South Africa)

on behalf of the Bern Convention





37th meeting of the Standing Committee of the Bern Convention (Strasbourg, 5-8 December 2017)









Strasbourg, 2 November 2017 [Inf08e_2017.docx] T-PVS/Inf (2017) 8

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFT
AND NATURAL HABITATS

Standing Committee

37th meeting Strasbourg, 5-8 December 2017

CODE OF CONDUCT FOR INVASIVE ALIEN TREES

FINAL DRAFT -

November 2017

Document prepared by
Mr Giuseppe Brundu & Mr David M. Richardson
(Department of Agriculture, University of Sassari, Italy - Centre for Invasion Biology, Department of
Botany & Zoology, Stellenbosch University, South Africa)
on behalf of the Bern Convention

This document will not be distributed at the meeting. Please bring this copy. Ce document ne sera plus distribué en réunion. Prière de vous munir de cet exemplaire.



Strasbourg, 2 November 2017 [Inf08e_2017.docx] T-PVS/Inf (2017) 8

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

Standing Committee

37th meeting Strasbourg, 5-8 December 2017

CODE OF CONDUCT FOR INVASIVE ALIEN TREES

SECOND DRAFT VERSION WITH VISIBLE CHANGES TO THE DOCUMENT

IN BLACK = ORIGINAL TEXT (NO REVISIONS REQUESTED)

IN BLUE = TEXT ADDED/MODIFIED FOR THE FIRST REVISION DURING 2016

 $\underline{\text{IN DARK ORANGE}}$ = TEXT ADDED/MODIFIED FOR THE SECOND REVISION DURING 2017

Document prepared by
Mr Giuseppe Brundu & Mr David M. Richardson
(Department of Agriculture, University of Sassari, Italy - Centre for Invasion Biology, Department of
Botany & Zoology, Stellenbosch University, South Africa)
on behalf of the Bern Convention

This document will not be distributed at the meeting. Please bring this copy. Ce document ne sera plus distribué en réunion. Prière de vous munir de cet exemplaire.





T-PVS/Inf (2017) 8 - 4 -

1. Rationale and aims of the Code of Conduct

This Code of Conduct is addressed to all relevant stakeholders and decision makers in the 47 Member States of the Council of Europe. It is intended to provide guidance to reduce the negative impacts that might originate from an unregulated use and spread of invasive alien trees, i.e. those alien tree species whose introduction or spread has been found to threaten or adversely impact upon biodiversity and related ecosystem services.

Alien trees and well-managed planted forests of alien tree species can be useful in providing various forest goods and services and helping to reduce the pressure on natural forests (FAO 2015b) or provide opportunities for adaptation to climate change and global change.

However, a small number of alien trees are invasive or might become invasive – i.e. they spread from planting sites into adjoining areas, and sometimes cause substantial damage upon biodiversity and related ecosystem services. The challenge is to manage alien trees and existing and future planted forests of alien trees to maximize current benefits and opportunities, while minimising risks and negative impacts, without compromising future benefits and land uses.

To this aim, eleven principles are proposed in the present Code of Conduct:

- · Be aware of regulations concerning invasive alien trees;
- Be aware of which alien tree species are invasive or that have a high risk of becoming invasive, and of the invasion debt;
- · Develop systems for information sharing and training programmes;
- Promote where possible the use of native trees
- Adopt good nursery and management practices;
- · Adopt good practices for habitat restoration;
- Promote and implement early detection & rapid response programmes;
- Establish or join a network of sentinel sites;
- Engage with the public on the risks posed by invasive alien trees, their impacts and on options for management;
- Consider developing research activities on invasive alien trees species and becoming involved in collaborative research projects at national and regional levels;
- · Take global change trends into consideration.

- 5 - T-PVS/Inf (2017) 8

2. Code of Conduct

2.1 Focus of the Code of Conduct: Invasive Alien Trees

In accordance with the CBD² definition, the term alien³ tree has exclusively a biogeographical meaning, i.e. it refers to a tree species, subspecies or lower taxon, introduced outside its natural past or present distribution and it includes any part, seeds, or propagules of such species that might survive and subsequently reproduce. As such, the term alien tree does not include any negative evaluation of the tree species.

Alien trees can be present outside their native range in confined environments (e.g. Botanic Gardens and Arboreta, plantations) or can be established in the environment. In this Code, the term naturalised alien tree species will be used to indicate those alien tree species that have self-sustaining populations, undergo natural dispersal and become incorporated within the resident flora in the environment.

In accordance with the CBD definition, and for the purposes of this Code, an invasive alien tree is herewith defined as an alien tree species whose introduction and/or spread threaten or adversely impact upon biodiversity and related ecosystem services.

Not all alien trees will become naturalised. Similarly, invasive alien trees are a subset of the naturalised alien trees, as many naturalised alien trees do not go on to become invasive, i.e. they do not threaten biological diversity and do not cause economic or environmental harm.

Therefore, the terms alien tree, naturalised alien tree and invasive alien tree are used throughout this Code of Conduct, with the different meaning as above explained, in accordance with the CBD definitions (COP 6 Decision VI/23), the Recommendations of the Standing Committee

Cf. the following section 2.1 for the definition of "invasive alien tree used in the present Code.

² (Decision V/8 of the Conference of the Parties to the Convention on Biological Diversity).

³ In the context of the present Code of Conduct the terms alien, non-native, exotic and introduced tree are considered as equivalent. In accordance with the CBD definition, the term alien tree has exclusively a biogeographical meaning, i.e. it refers to a species, subspecies or lower taxon, introduced outside its natural past or present distribution; it includes any part, seeds, or propagules of such species that might survive and subsequently reproduce. As such, the term alien tree does not include any negative evaluation of the tree species. Only a small percentage of all the alien tree species are, or may become after some time, invasive alien tree species (COP 6 Decision VI/23 "Alien species that threaten ecosystems, habitats or species"). Importantly, an alien tree species is "introduced outside its natural past or present distribution" deliberately or accidentally by man. The defition takes into consideration the Recommendation No. 142 (2009) of the Standing Committee (Convention on the Conservation of European Wildlife and Natural Habitats), adopted on 26 November 2009, interpreting the CBD definition of invasive alien species to take into account climate change, "recommends Contracting Parties to the Convention and invites Observer States to: 1. interpret the term "alien species" for the purpose of the implementation of the European Strategy on Invasive Alien Species as not including native species naturally extending their range in response to climate change" (Cf. Section 4.6.2 in this Code). As a result, also past mass migratory events in forest tree populations, postglacial recolonization routes and similar events are not considered herewith in the definition of alien tree species. We focus on alien trees deliberately or accidentally introduced by man outside its natural past or present distribution, where "past" refers to the definition of "neophytes" (i.e. introduced after the 1,500) as used in the CBD context and defined by Pyšek et al. (2004). In addition, with specific concern to this Code, an alien tree species is alien to all the 47 Member States of the Council of Europe. According to this definition the term 'alien tree species' does not include foreign provenances of tree species that are native in at least one of the 47 Member States of the Council of Europe.

According to Regulation EU no. 1143/2014 (Art. 3), an invasive alien species is in the naturalisation stage when its population is self-sustaining.



Modifications requested at and after the 36th Standing Committee (2016)

Modifications requested by the Confederation of European Forest Owners (CEPF) and the European Farmers and Agri-Cooperatives (COPA and COGECA) (2017)

Comments from FAO (2017)

Modification requested at and after the Bern Convention Group of Experts on Invasive Alien Species held in Funchal, Madeira (Portugal) on 1-3 June 2017.





1. Rationale and aims of the Code of Conduct

This Code of Conduct is addressed to all relevant stakeholders and decision makers in the 47 Member States of the Council of Europe. It is intended to provide guidance to reduce the negative impacts that might originate from an unregulated use and spread of **invasive¹ alien trees**, i.e. those alien tree species whose introduction or spread has been found to threaten or adversely impact upon biodiversity and related ecosystem services.

Alien trees and well-managed planted forests of alien tree species can be useful in providing various forest goods and services and helping to reduce the pressure on natural forests (FAO 2015b) or provide opportunities for adaptation to climate change and global change.

However, a small number of alien trees are invasive or might become invasive – i.e. they spread from planting sites into adjoining areas, and sometimes cause substantial damage upon biodiversity and related ecosystem services. The challenge is to manage alien trees and existing and future planted forests of alien trees to maximize current benefits and opportunities, while minimising risks and negative impacts, without compromising future benefits and land uses.





- Be aware of regulations concerning invasive alien trees;
- Be aware of which alien tree species are invasive or that have a high risk of becoming invasive, and of the invasion debt;
- Develop systems for information sharing and training programmes;
- Promote where possible the use of native trees
- Adopt good nursery and management practices;
- Adopt good practices for habitat restoration;
- Promote and implement early detection & rapid response programmes;
- Establish or join a network of sentinel sites;
- Engage with the public on the risks posed by invasive alien trees, their impacts and on options for management;
- Consider developing research activities on invasive alien trees species and becoming involved in collaborative research projects at national and regional levels;
- Take global change trends into consideration.



TITLE

OLD: Code of Conduct on Planted Forest & Invasive Alien Trees

NEW: Code of Conduct for Invasive Alien Trees

Rationale:

Alien trees and well-managed planted forests of alien tree species can be useful in providing various **forest goods and services** and helping to reduce the pressure on natural forests or provide opportunities for **adaptation to climate** change and global change. Only a limited number of alien trees might become invasive.



DEFINITIONS and MAIN FOCUS

OLD: Code of Conduct on Planted Forest & Invasive Alien Trees

NEW: Invasive Alien Trees

Rationale:

In accordance with the CBD definition, and for the purposes of this Code, an **invasive alien tree** is herewith defined as an alien tree species whose introduction and/or spread **threaten or adversely impact upon biodiversity and related ecosystem services.**



EXAMPLES of IATs

OLD: Code of Conduct on Planted Forest & Invasive Alien Trees

NEW: Invasive Alien Trees

Rationale:

There is no single tree can be considered invasive in all the 47 States of the Council of Europe, due to a huge variation in biogeography and land uses. Although some States have declared some trees species as invasive in the whole Country or in some regions, generalisations are not possible and invasiveness has to be evaluated with a dedicated risk assessments.

47 Member States Member States

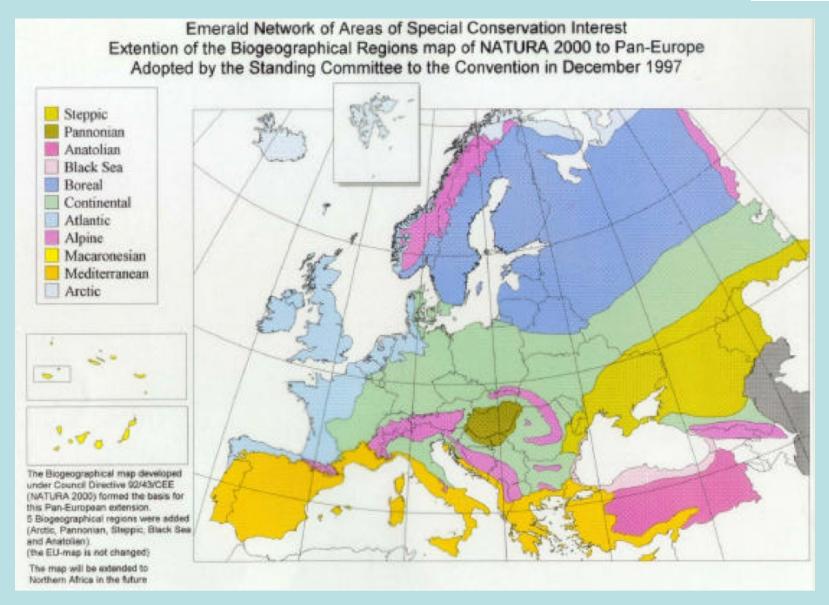






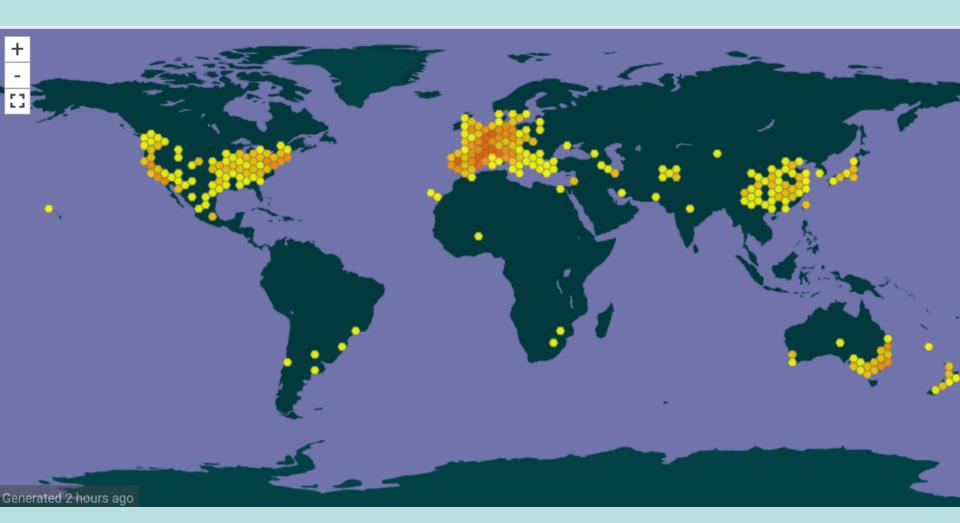












https://www.gbif.org/species/3190653 (Ailanthus altissima)





4. Background information: a knowledge basis for the Code of Conduct

4.1 Benefits arising from planted forests and planted forests of alien trees

Planted forests are forests predominantly composed of trees established through planting and/or deliberate seeding (FAO 2012)³⁵. Planted forest of introduced species (PFIS) is a subcategory of planted forest, where the planted/seeded trees are predominantly of introduced species (FAO 2012). In 2010, the total area of planted forests was estimated to be 264 million ha (about 7 % of the total global forest area; FAO 2010a), and this increased to an estimated 277.9 million ha in 2015 (FAO 2015a, 2015b; Payn et al. 2015)³⁶. Although there are marked differences between and within regions, it has been estimated that between 18% and 19% of planted forests comprise alien tree species (Payn et al. 2015; FAO 2015a, 2015b).

Planted forests designed to provide multiple ecosystem services can reduce pressure on natural forests, and can even restore some ecological services provided by natural forests. They can also play a key role in the fight against global warming, through carbon sequestration. Paquette & Messier (2010) reviewed the economic, social, and environmental services that plantations can provide, and make a plea for the implementation of well-conceived, diverse, multi-purpose plantations as a way to conserve forest biodiversity and ecosystem functions. Well-designed, multi-purposed planted forests can help mitigate climate change³⁷ through direct carbon sequestration or by avoiding deforestation, while simultaneously protecting remaining natural forests through increased productivity.





4.2 Alien tree species in Planted Forests and for other uses: historical and recent pathways of introduction

4.2.1 General aspects

As stated in Section 1, in accordance with the CBD and the Reg. (EU) No. 1143/20014, the term alien tree is used throughout this Code of Conduct. It has the same meaning as exotic, introduced and non-native. In accordance with the CBD definition, the term alien tree has exclusively a biogeographical meaning, i.e. it refers to a tree species, subspecies or lower taxon (including provenance), introduced by man outside its natural past or present distribution.





4.4 International initiatives and legislation on invasive alien species and invasive alien trees

Many international instruments refer to invasive alien species that may have undesired environmental or economic impacts. These range from legally binding treaties to non-binding technical guidance focused on particular species or pathways. The main international regulations concerning invasive alien species are given in the following with specific reference to invasive alien trees and planted forests. The information here provided is intended to provide support to the principle "be aware of regulations" of the present Code.

4.4.1 The Convention on Biological Diversity

The Convention on Biological Diversity (CBD), negotiated under the auspices of the United Nations Environment Programme (UNEP), was adopted in 1992 and entered into force in 1993. Its aims are the conservation of biological diversity, the sustainable use of biological resources, and the fair and equitable sharing of benefits arising from the use of genetic resources (Secretariat of the Convention on Biological Diversity 2001a, 2001b). CBD requires Parties "as far as possible and as appropriate (to) prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species" under the provision of Article 8(h).





Thank you for your attention

