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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE  
AND NATURAL HABITATS

Standing Committee

41<sup>st</sup> meeting  
29 November - 3 December 2021

- DRAFT POSITION PAPER -

Risks associated with the use of invasive alien tree species as  
a nature-based solution to mitigate climate change.

*Document prepared by the independent expert  
Mr Giuseppe Brundu*

## Bern Convention Newsroom

41st Standing Committee meeting

29 NOVEMBER TO 3 DECEMBER 2021

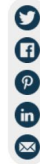


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### DRAFT POSITION PAPER

**Risks associated with the use of invasive alien  
tree species as a nature-based solution to  
mitigate climate change**

Over the past 25 years, the Council of Europe has assisted Bern Convention Contracting Parties in designing and implementing control measures for **invasive alien species**, with the aim of reducing their negative impact on native biodiversity in Europe. The Council has produced a number of reports and policy documents in the field.

## **The European Strategy on Invasive Alien Species (2003)**

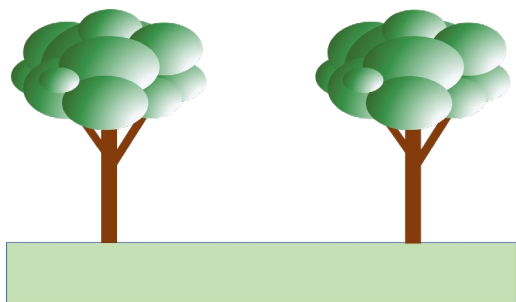
**Voluntary codes of conduct** addressed to various sectors of activity which are potential pathways for the establishment and spread of invasive alien species in Europe.

## **Recommendation No. 193 (2017) on the European Code of Conduct for Invasive Alien Trees (2017) [document T-PVS/Inf (2017) 8]:**

(1) take the European Code of Conduct mentioned above into account while drawing up other relevant codes - or where appropriate - draw up national codes of conduct on invasive alien trees; and (2) collaborate as appropriate with the actors involved in forestry activities in implementing and disseminating good practices and codes of conduct aimed at preventing and managing of introduction, release and spread of invasive alien trees.

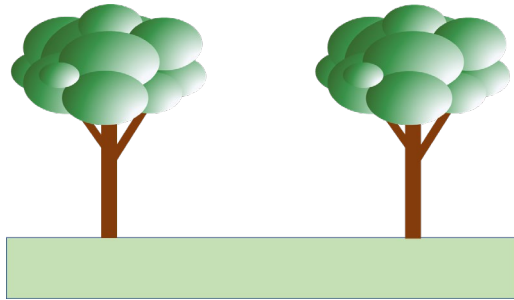
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At its last meeting in July 2021, the Bern Convention Group of Experts on Invasive Alien Species discussed the need to raise awareness among policy makers of the **risks** associated with the usage of **invasive alien tree species** as a nature-based solution to **mitigate climate change**.



Climate Change related pathways for the introduction of **invasive alien trees**:

- **Mitigate negative impacts on forests and forestry**
- **Carbon capture and storage (Nature Based Solutions)**



Biol Invasions (2014) 16:663–675

DOI 10.1007/s10530-013-0614-9

ORIGINAL PAPER

## Tree invasions into treeless areas: mechanisms and ecosystem processes

Philip W. Rundel · Ian A. Dickie · David M. Richardson

## FRONTIERS IN ECOLOGY and the ENVIRONMENT

Reviews

### Should tree invasions be used in treeless ecosystems to mitigate climate change?

Martin A Nuñez✉, Kimberley T Davis, Romina D Dimarco, Duane A Peltzer, Juan Paritsis, Bruce D Maxwell, Aníbal Pauchard

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GCB REVIEWS

Global Change Biology WILEY

## Ten golden rules for reforestation to optimize carbon sequestration, biodiversity recovery and livelihood benefits

Alice Di Sacco<sup>1</sup> | Kate A. Hardwick<sup>1</sup> | David Blakesley<sup>2,3</sup> | Pedro H. S. Branc  
Elinor Breman<sup>1</sup> | Loic Cecilio Rebola<sup>1,5</sup> | Susan Chomba<sup>6</sup> | Kingsley Dixor  
Stephen Elliott<sup>9</sup> | Godfrey Ruyonga<sup>10</sup> | Kirsty Shaw<sup>11</sup> | Paul Smith<sup>11</sup> |  
Rhian J. Smith<sup>1</sup> | Alexandre Antonelli<sup>1,12,13</sup>

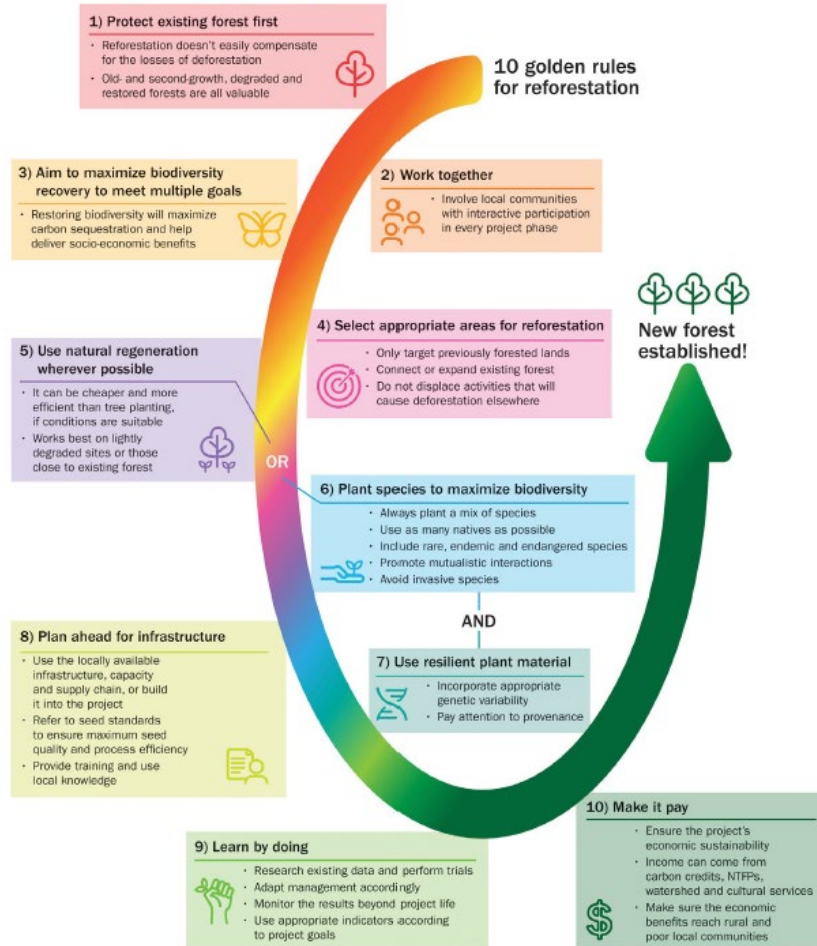
NeoBiota 61: 65–116 (2020)  
doi: 10.3897/neobiota.65.58380  
<http://neobiota.pensoft.net>

REVIEW ARTICLE

A peer-reviewed open-access journal  
 NeoBiota  
Advancing research on alien species and biological invasions

Global guidelines for the sustainable use of non-native trees to prevent tree invasions and mitigate their negative impacts





- **Prioritise conservation and protection of remaining natural forests, old-growth forest, and other types of wooded and tree-less habitats, such as wetlands, peatlands, grasslands, for the long term and climate change adaptation;**
- **Protect existing forest and adopt adequate preventive measures to analyse and reduce the risk of negative impact from biotic and abiotic risks, including fire risks;**
- **Restore degraded natural forest ecosystems, avoiding tree planting in natural non-forested habitats, such as wetlands, peatlands, grasslands, and prioritise areas that improve conservation value;**
- **Eliminate incentives and subsidies that promote practices that lead to loss or degradation of native ecosystems and a generalised conversion of any land types into forest plantations;**
- **Be aware of, and adopt, whenever possible, the Ten Golden Rules [supported by scientists from the Royal Botanic Gardens, Kew (RBG Kew) and Botanic Gardens Conservation International (BGCI)] for reforestation to optimize carbon sequestration, biodiversity recovery and livelihood benefits;**



- **Apply the precautionary principle and rigorous pre-entry screening or risk assessment for all new alien trees, in particular when these species do not have a documented history of planting with limited risk of escaping from plantation sites;**
- **Be aware of the documented existence of a time lag between first alien tree introduction and invasive behaviours as well as possible range-shift driven by anthropogenic climate-change;**
- **Apply the precautionary principle and rigorous biodiversity safeguards to all large-scale planting tree projects, and forest restoration initiatives - including those labelled as Nature-Based Solutions and under the Bonn Challenge;**
- **Promote the use of native and threatened tree species in reforestation/afforestation/restoration initiatives and highlight the risks of planting invasive alien tree species in areas rich of native/endemic tree biodiversity.**

# Thank you!

