



Case Study Report FRISK-GO

Title: 'Pine wood nematode information centre'

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Adding value with a European Forest Risk Facility

Case study reports are a tool to investigate and document how a European Forest Risk Facility can add value to current actions using concrete examples based on real events/incidents

A) Description and background

Pine wood nematode

Occurring from Japan and/or China the nematode was introduced to Portugal via the United States. It first occurred at the Lisbon harbour. This highlights once again the increasing threat of pest and diseases being spread and introduced to non-infested countries as a result of global trade. The spread of pest and diseases is further excelled by an increasing amount of fresh material being exchanged within very short time spans. Also the introduction of exotic species has been increasing steadily during the last decades.

The pine wood nematode disease was first discovered in Portugal in 1999. It breeds on pine and requires a beetle vector called monocamus. The nematode can kill infected trees within a few weeks. The pine wood nematode has become a quarantine organism and an eradication programme was launched with good results. Nonetheless further contaminated areas emerged throughout Portugal leading to a declaration of the country being regarded as fully contaminated. A contingency procedure was put in place to ensure the disease stays within Portugal and does not in the spread across Europe.

What makes the pine wood nematode disease particularly unusual is the level of threat it induces. Nearly all endemic European conifers can be affected by this disease. Climatic limitations associated to mean summer temperatures will affect it's spread to the north of Europe but global warming prognosis will create more favourable conditions in a large number of European countries.

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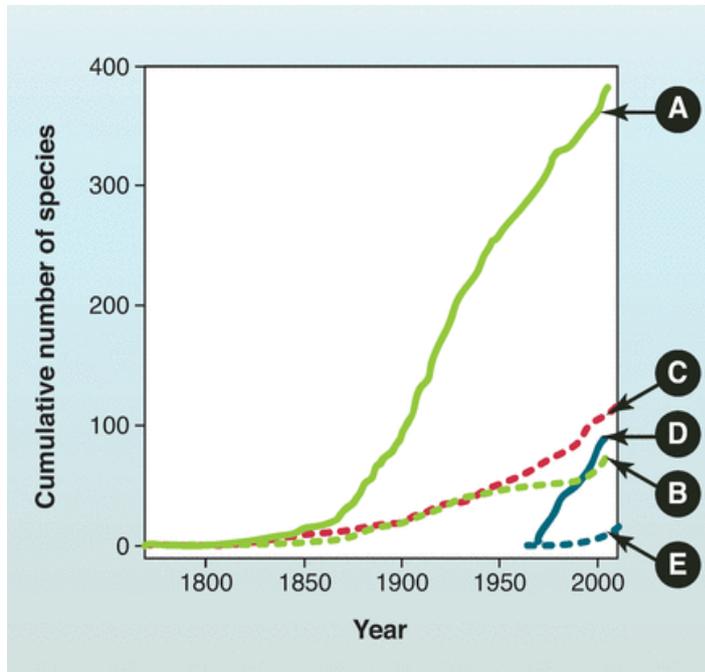


Fig. 1. A composite representation of the increasing number of pests and pathogens affecting different regions. Solid lines indicate the number of introduced species, and dashed lines indicate the number of pests and/or pathogens. Common colors indicate the same geographical region (green, United States; red, Europe; blue, United Kingdom or Great Britain). (A) Cumulative number of nonnative insects introduced and found in association with trees to the United States during 1800 to 2006 (90). (B) Cumulative number of “high-impact” nonnative tree insect pests and pathogens introduced to the United States during 1800 to 2006 (90). (C) Cumulative number of nonnative tree pathogens introduced to Europe during 1800 to 2009 (57). (D) Cumulative number of nonnative invertebrates introduced to Great Britain during 1970 to 2004 (91). (E) Cumulative number tree pests and pathogens introduced to the UK during 1965 to 2012 (92). Additional information about the data sources is provided in the supplementary materials.

B) Approach taken

Many regulations are in place to control expansion of quarantine organisms. These regulations are implemented at the European level by DG SANCO and are imposed to EU member countries. The decision making process at the EU level is not always easy to understand and follow at the regional level when you are not part of the national forest health services. In addition, as communication between services is very hierarchical, local services in the field are often not aware of procedures and ongoing actions with a particular region. On demand of regional stakeholders, the Regional Office of the European Forest Institute ‘EFIATLANTIC’ organised a regional conference for the Atlantic Rim area to inform local actors about latest knowledge and developments around the pine wood nematode disease. The event was followed by establishing a trans-boundary pine wood nematode expert group and the designing of a web portal entitled ‘pine wood nematode information centre’. This portal offers an opportunity to get informed about the latest events and research activities ongoing to address this issue. In addition, it also provides administrative

contacts related to the pine wood nematode management in the countries and regions. Links to online reports about the biology of the animal and latest audits and eradication procedures ongoing are also provided.

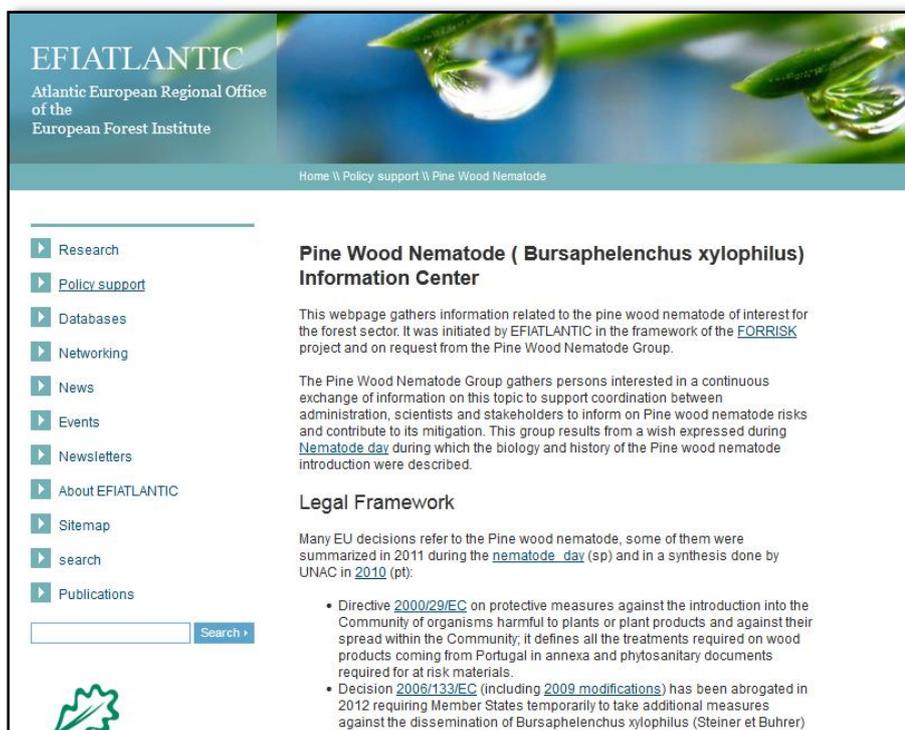


Figure 2. Screenshot of the pine wood nematode information centre hosted by the EFI Regional Office EFIATLANTIC(http://www.efiatlantic.efi.int/portal/policy_support/pine_wood_nematode)

C) Added value

The main benefit of pine wood nematode information centre' is that besides public bodies in charge of pine wood nematode management who will have their own information sources, any other interested actor engaged, affected or interested in the disease can consult access up to date information from science or administrations. This webpage is hosted by EFIATLANTIC and kept up to date with the assistance of the members of the pine wood nematode expert group.

Such an information centre as described for the pine wood nematode disease is an important information sources for a wide array of actors. Embedding such information within a European Forest Risk Facility will be of high value as it has as its guiding principles the connection, collection, exchange and generation of new knowledge and expertise in research and management to support policy decision makers. One of the main products and services requested from a future European Forest Risk Facility is the provision and value

adding of information. This includes the compilation of relevant datasets, providing access to expert information from science (including monitoring), management while ensuring the linkages to existing policy frameworks. Together with EFIATLANTIC a European Forest Risk Facility could investigate on how to both maintain and further develop the currently available pine wood nematode information centre in order to enhance and tailor information and its availability to those actors in need or interested in the pine wood nematode.