

INTEGRATE seminar on managing bark beetle impacts on forests  
Białowieża, 25-27.06.2018

### Final conclusions

The seminar on managing bark beetle impacts on forests was organized by the Polish Ministry of Environment and the General Directorate of State Forests within their chairmanship of INTEGRATE network, facilitated by the European Forest Institute, Bonn Office, within the INFORMAR project. More than 50 participants discussed the bark beetle impact in several European countries based on the examples presented by the speakers from Croatia, Czechia, Germany, Latvia, Slovakia and Poland, with special emphasis to protected areas and related restrictions in human intervention.

These conclusions have been drafted by Prof. Wojciech Grodzki, Dr. Miloš Knížek and Dr. Ralf Petercord. They were shared with all participants of the meeting and comments received via mail have been incorporated into this text.

1. It is misleading to think of many of today's national parks (even nature reserves) as being „natural“ and „untouched“ formerly by humans. At the same time, even if they are totally untouched and directly non-altered by anthropogenic influences, they, as a rule (in Europe at least), are too small to be considered self-sustained natural systems.
2. Many, if not most of the today's protected areas (at least those proclaimed in the past 40-20 years) with forest as a basic nature conservation objective were managed by foresters for decades and sometimes centuries and their high natural value was driven by previous management. This should be an argument by itself, that management (towards active protection and not targeting logging and timber industry demands) is a natural approach as it has been for centuries.
3. At present, spruce bark beetle *Ips typographus* (L.) affects large areas of spruce forests in many European countries. Outbreaks in particular countries are synchronized and depend to a large extent on the natural disturbances (wind damage, drought etc.) as well as on human sources. All climate scenarios indicate that those weather extremes might occur more often in future.
4. The need of control measures against bark beetles (in various extent, and except strictly protected areas) is commonly accepted. Applied bark beetle control measures and tools, similar everywhere, are well developed and documented.
5. Many challenges and obstacles (natural – logistic – human etc.) occur in the effective control of bark beetle outbreaks. In several situations, sustainable forest management (including sanitary cuts) in bark beetle affected stands is under discussion in the public but also under pressure from environmental groups and NGOs.
6. It is of high importance to communicate from the beginning the advantages of sustainable forest management also in view of enhancement of nature protection in managed forests and to clearly define the set of nature protection sites and goals.
7. The conversion of pure spruce stands into mixed ones is desirable in order to increase the resilience of forests. The active forest protection measures are then necessary in order to control spruce mortality due to bark beetle infestation.
8. The control of bark beetles in national parks can be useful and necessary if other subjects of protection have to be taken into account. This concerns also adjacent private forests, functioning as a protective forest and/or protection of indigenous spruce stands according to their genetic distinctiveness.

9. Białowieża Forest is a special area affected by *I. typographus*, where the last outbreak, started in 2012, is still ongoing. Several legal regulation, including the last one – the *judgement of the Court of Justice of the European Union* – hindered the proper control measures and thus the outbreak remains out of control, as the active forest protection measures are forbidden in the whole area, regardless the legal status of its individual parts. Only dead trees next to the hiking trails are allowed to remove for safety reasons. Such management limitation is out of discussion in the protected areas excluded by rule from human intervention..
10. Maintenance of the whole diversity of Białowieża Forest require the combination of passive protection what is conducted in Białowieża National Park and in reference area, with active protection in remaining area. Active protection is mainly related to conservation of open habitats as open forest and species which are dependent on that habitats. Only the coexistence of areas with different protection regimes, i.e. areas with sustainable forest management and areas with passive protection, will also ensure the fulfillment of the objectives of UNESCO IX and X criteria. The loss of old grown spruce trees and stands by bark beetles on such a wide area as Białowieża Forest in just a few years favors only a few species of trees, in particular the hornbeam. This ultimately leads to a significant decline in the biodiversity of such habitats.
11. Facing the importance of the bark beetle – related problems and existing controversies, the support of science and research is needed to base any decision on scientific sound facts and figures. The role of the European Forest Institute is highlighted in this respect not only as the facilitation of the INTEGRATE network.
12. Strong cross-country and international cooperation is needed and the issue should be brought to the attention of policy level at the European Commission in Brussels.