

Quick overview on global forest damage situation based on recent FRA report

Introduction of the proposed activity (2021-2022):
- *Extent and trends of forest damage in the UNECE region by the main causes*

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**Fourth (29th) meeting of the
UNECE/FAO Team of Specialists on monitoring
sustainable forest management**

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Background



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- Damage/Disturbance...
- FRA reports the area of forest affected by different **types of disturbances**: *Insects, Diseases, Severe weather events and Other.*
- UNECE/FAO. **Damage** *is a disturbance to forest which may be caused by biotic or abiotic agents, resulting in death, or a significant loss of vitality, productivity of value of trees and other components of the forest ecosystem.*
- Next, a summary of FRA key results from the main disturbance agents.
- Then, a quick introduction to our upcoming activity.
- Motivation for:
 - Why we should care about the issue of forest damage.
 - Why the work on harmonizing the methods of reporting and data collection is important.

FRA results –Fire, Insects, Diseases

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- Of the reported disturbance agents, fire is the global leader.
- Damage in the baseline year 2015 (in forest areas):
 - Fires (118 countries): 98 million ha
 - Insects (62 countries): 30.2 million ha
 - Diseases (51 countries): 6.6 million ha

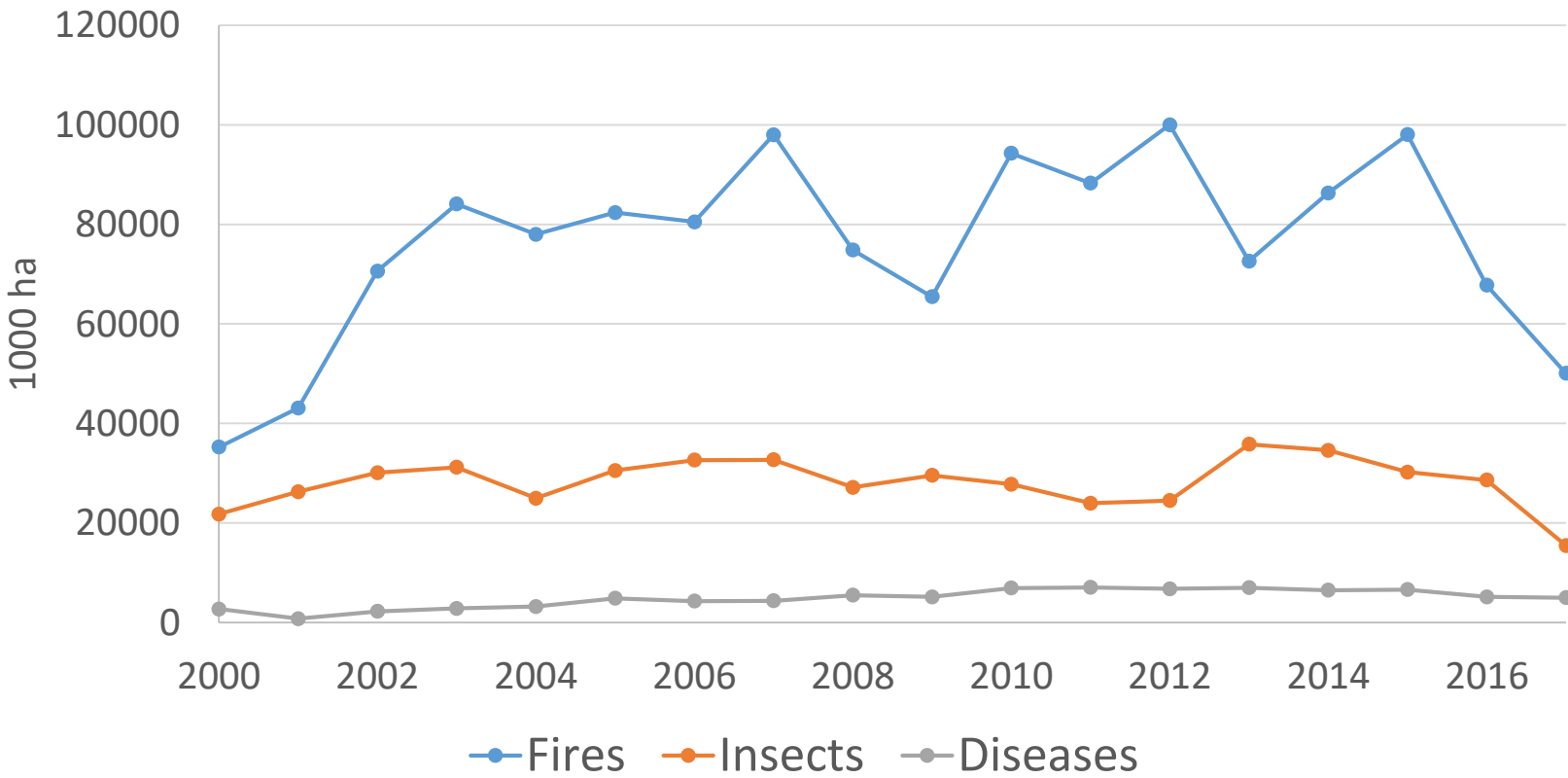
FRA results –Fire, Insects, Diseases

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- Trends over the reporting period (2000-2017) suggest the same pattern.

FRA disturbances in forest areas - GLOBAL



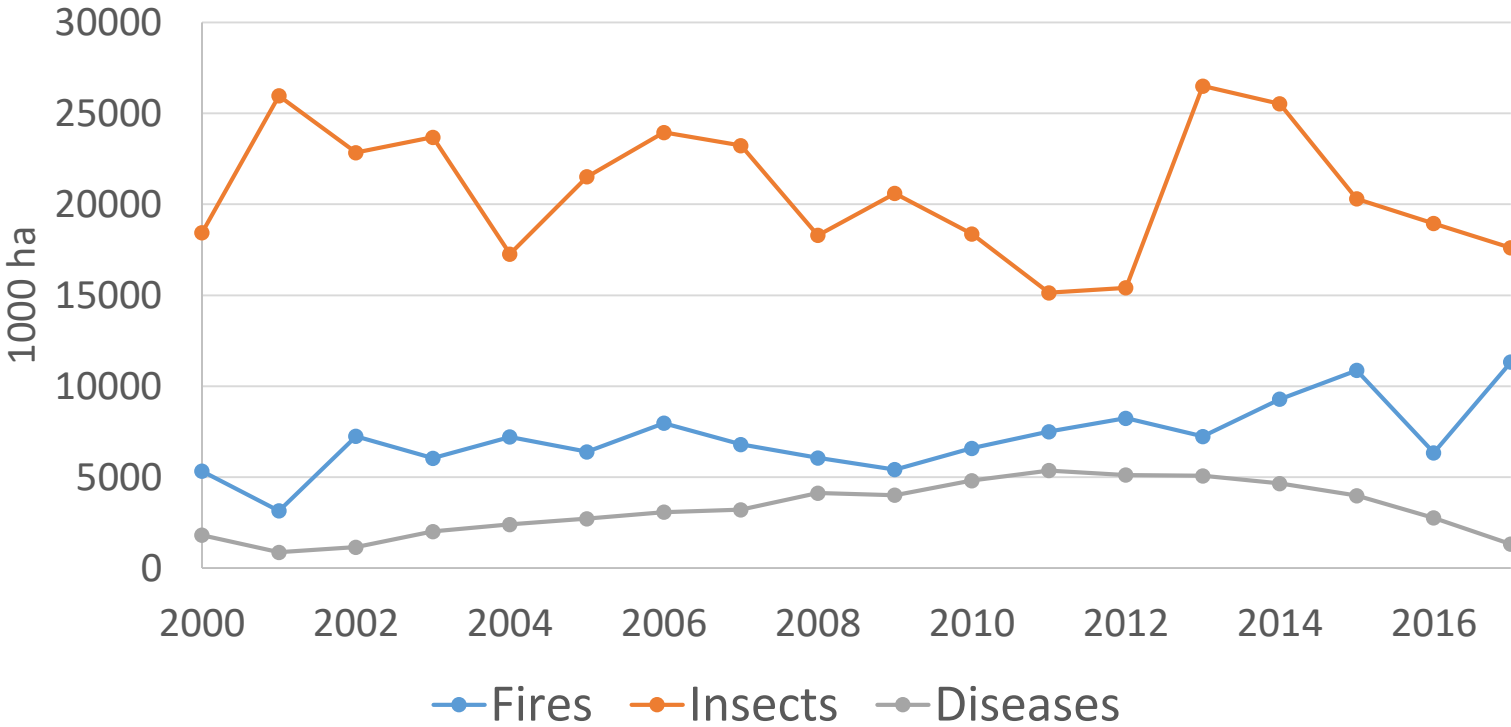
FRA results –Fire, Insects, Diseases

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- The UNECE region is different from 'GLOBAL'

FRA disturbances in forest areas - UNECE

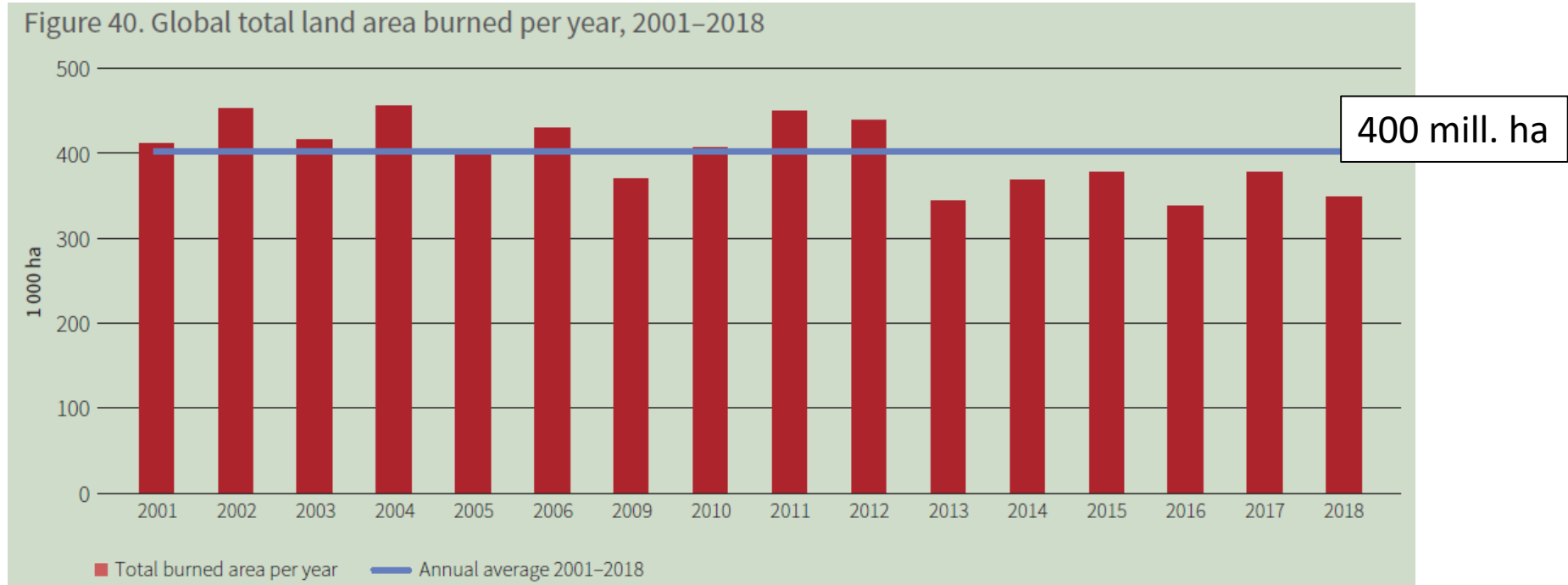


FRA results – Fire, Insects, Diseases

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- For fire, the situation gets more drastic when including non-forested areas:

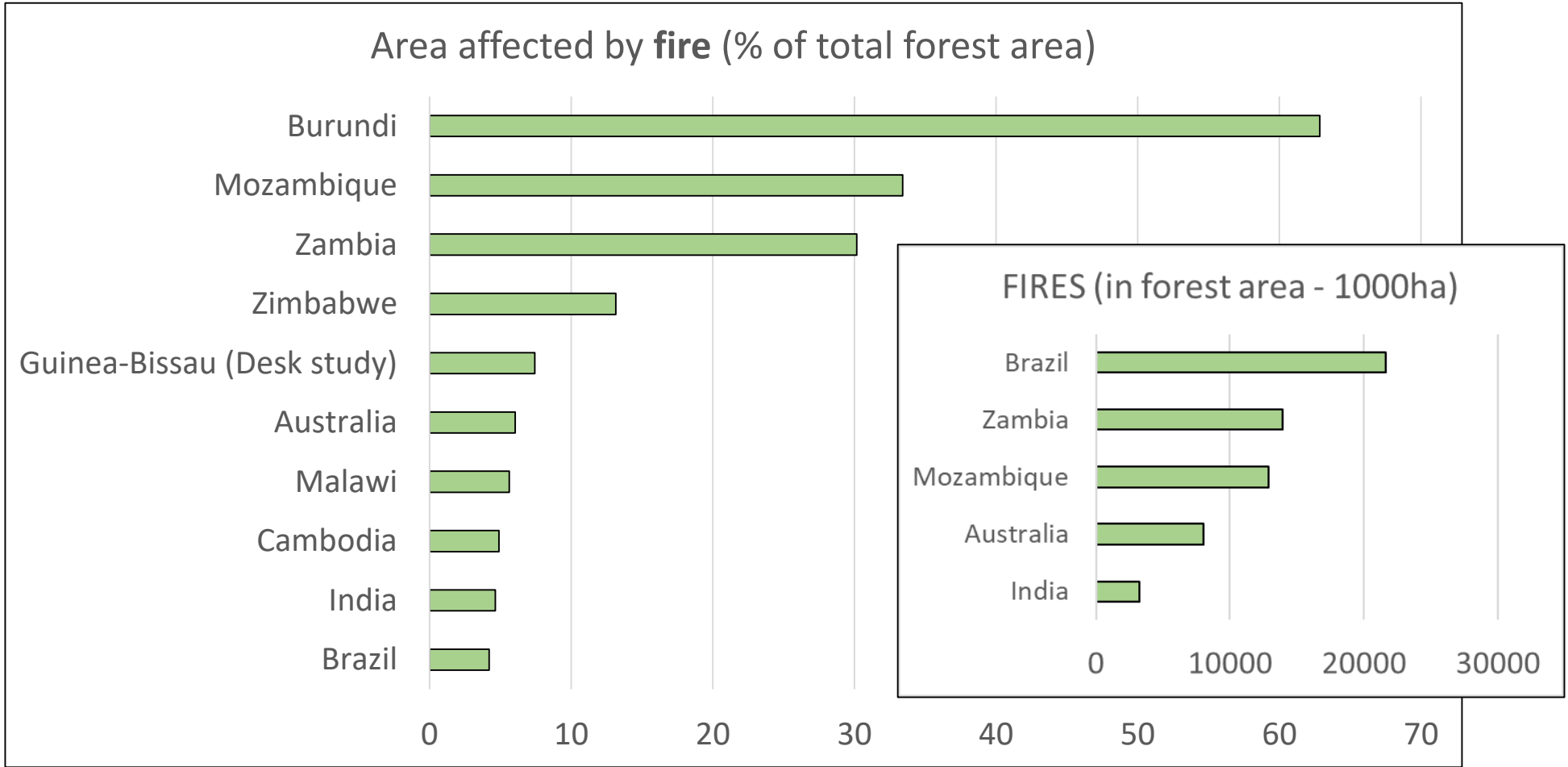


- Burned areas clearly the largest in Africa, followed by Oceania and South America.
- Canada, US, Russia and Portugal top the fire charts in UNECE area.

FRA results – some country-level examples

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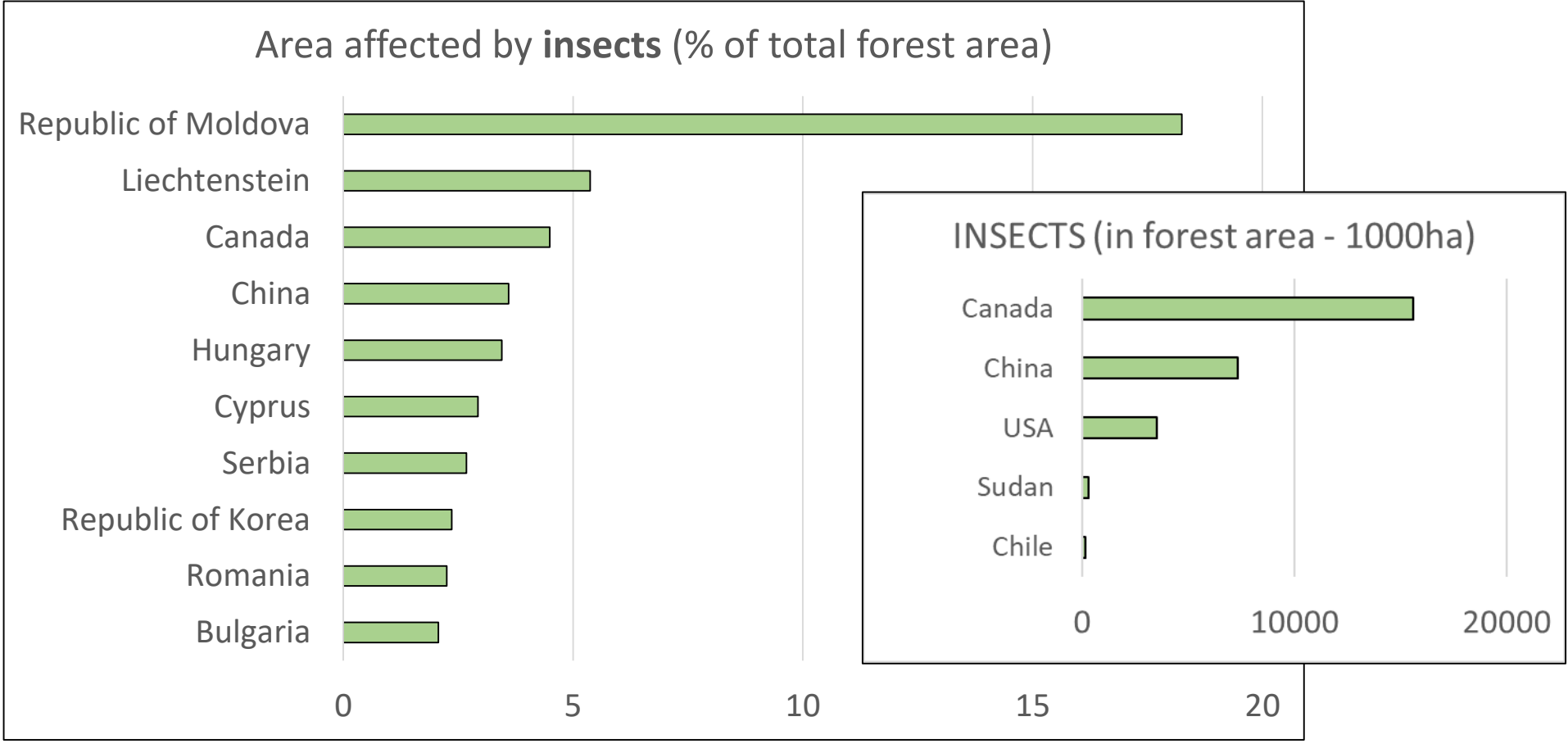
- The Top10 that NO country wants to top (averages from 2000 – 2017).



FRA results – some country-level examples

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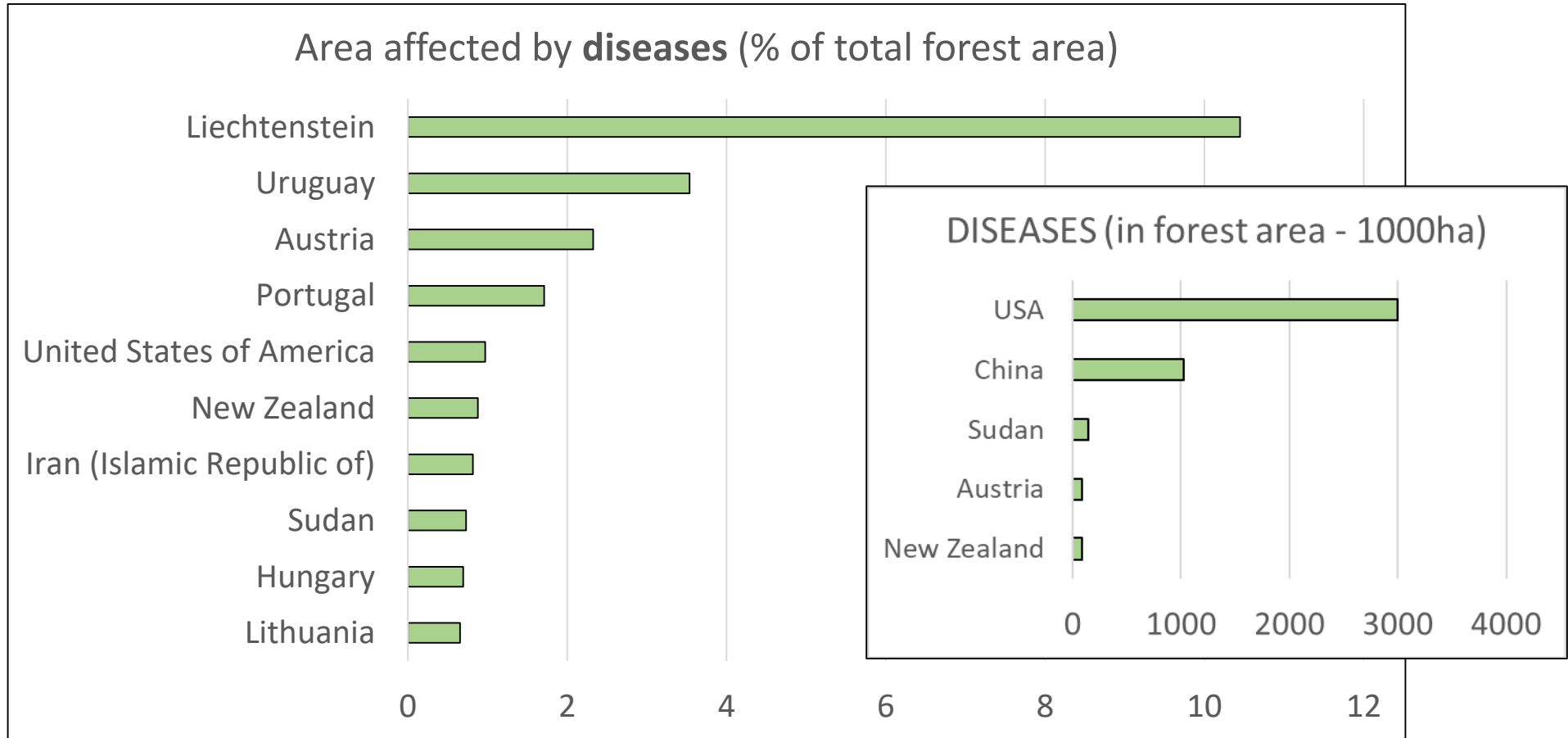
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FRA results – some country-level examples

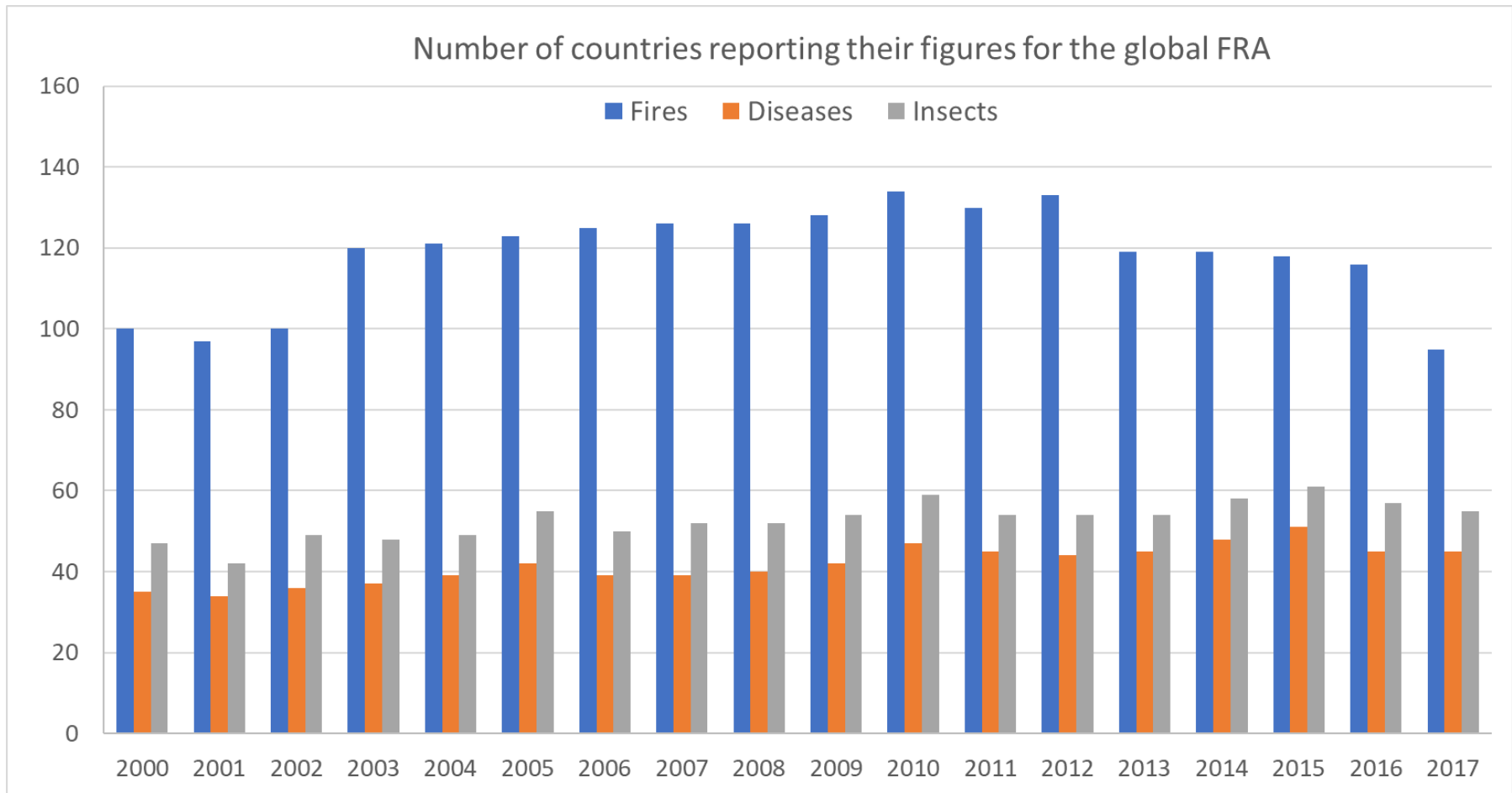
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- The Top10 that NO country wants to top (averages from 2000 – 2017).



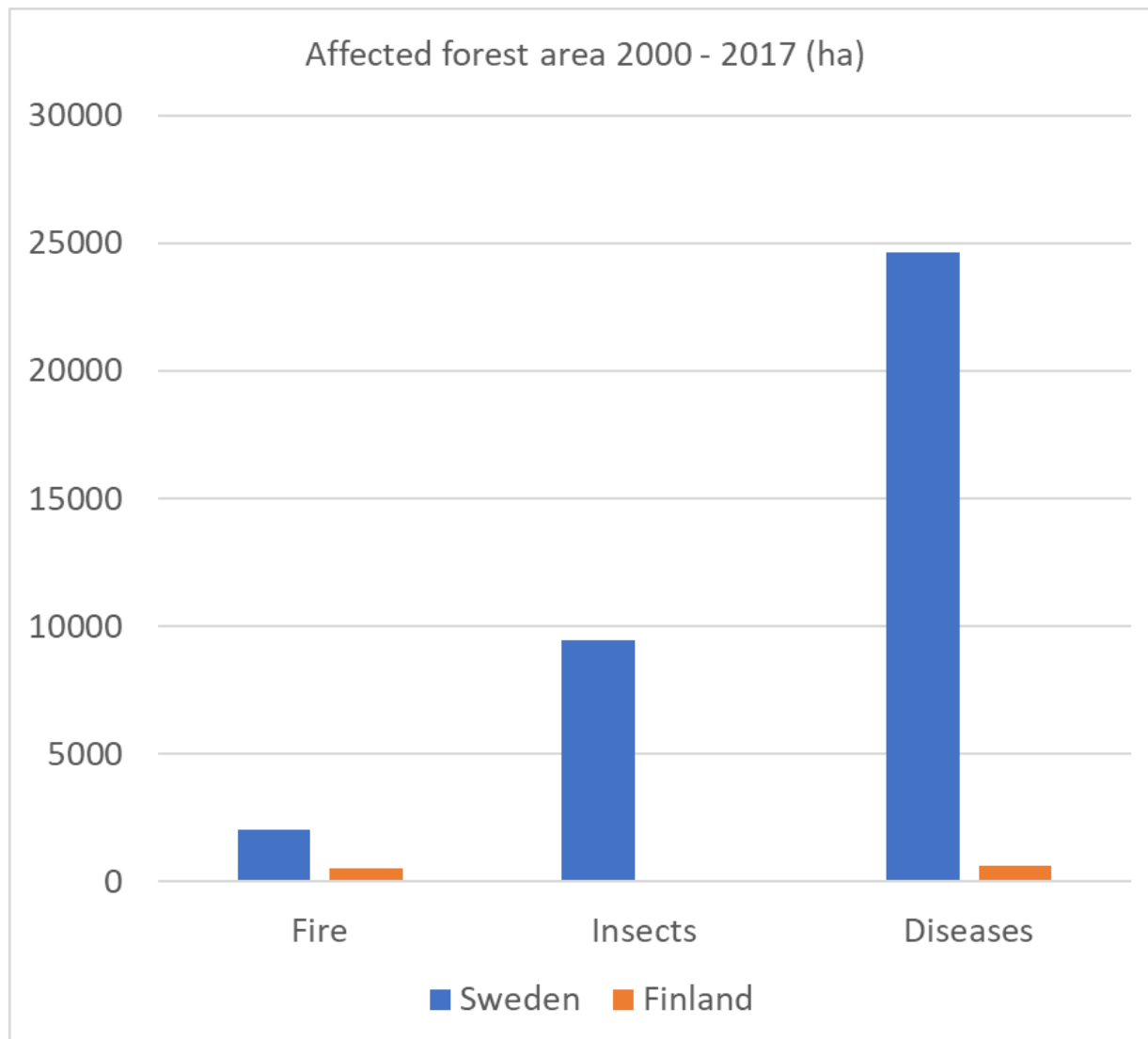


- Who reports and when:





- Reporting protocols.
 - Sweden VS Finland as an example.
 - Do you report only severe damage or also the mild ones?



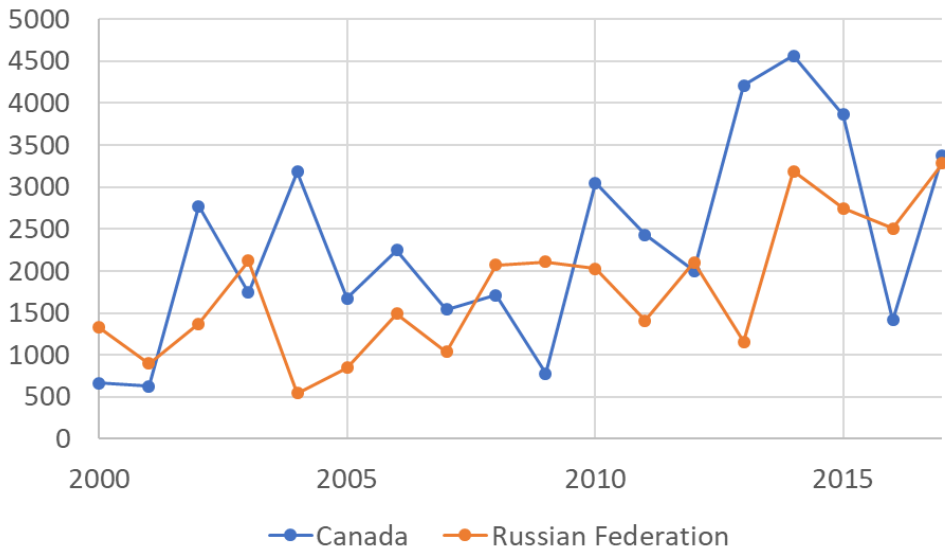
Issues

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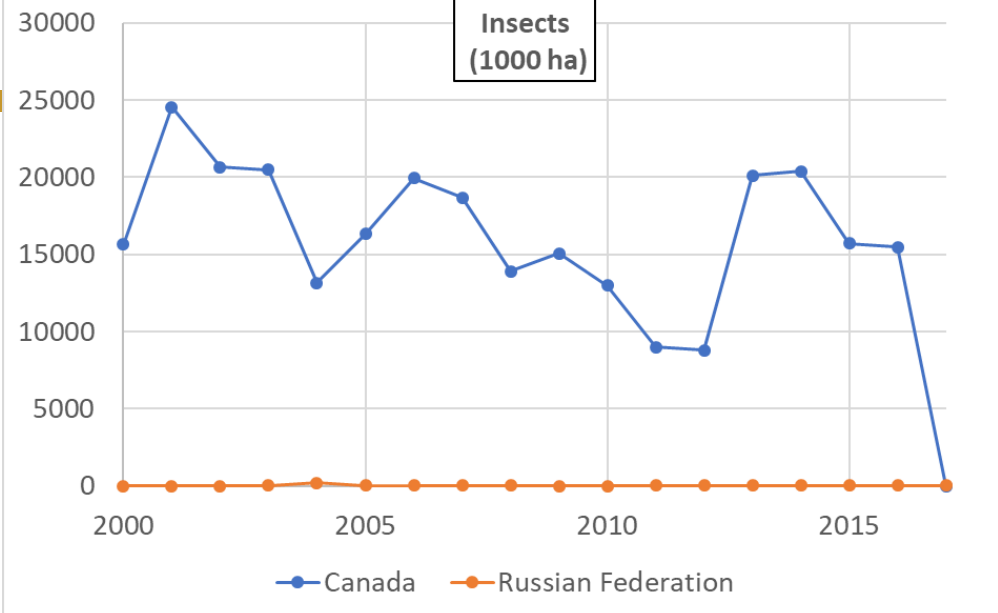


- Reporting protocols.
 - Canada VS Russia as an example.
 - What do/can you report?

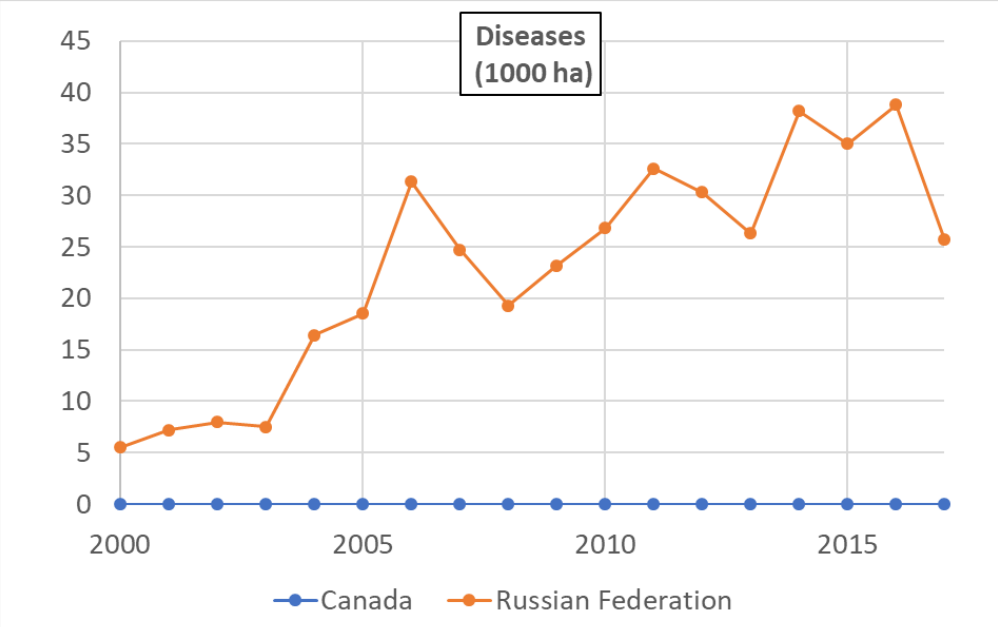
Fires (1000 ha)



Insects (1000 ha)



Diseases (1000 ha)

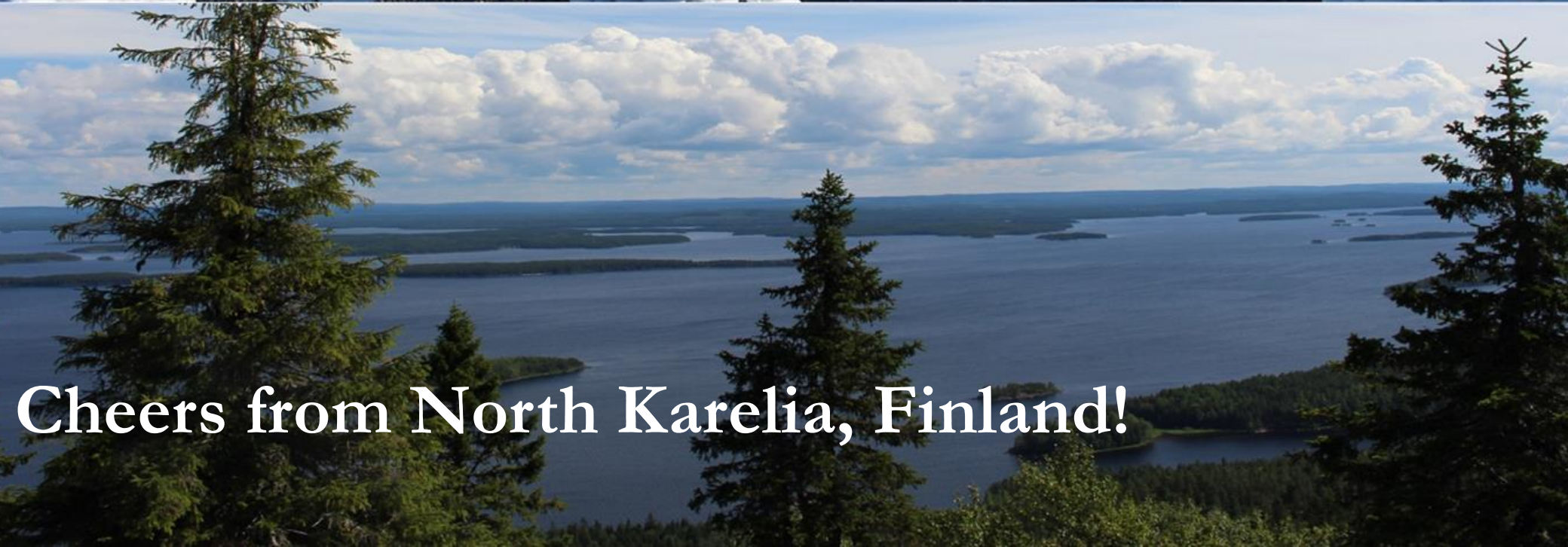


Our upcoming study



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- Overview on the extent and trends of forest damage by the main causes (UNECE region)
- Focus on identifying the most significant pest agents as well as related trends.
 - Has a certain insect gotten more severe over the years? Expanded northwards etc.?
- Datasets: National Forest Inventories (ENFIN network), ICP Level I data, FRA, EFI datasets... whatever we find :).
- Aim: peer-reviewed article (not only a report).
- Other aim: raise awareness! **Lots of it!**
- The issue of varying data collection and reporting methods belongs to the other groups – yet, co-operation and communication is natural here.
- Serious work begins in 02/2021.



Cheers from **North Karelia, Finland!**