

## Forest storm resilience improved with latest software

October 7 2015



Windblown Corsican pine. Credit: Forestry Commission

Software to help protect forests from storm damage is being released today by Forest Research, the research agency of the Forestry Commission.



The latest version of the computer-based tool ForestGALES uses data about the trees and the site (species, soil type) then works out the 'windiness' to estimate the level of risk to trees from uprooting or stem breakage. The information will help <u>forest managers</u> to create more resilient woodlands, reducing the heavy economic cost of timber damage.

Defra Minister Rory Stewart commented:

'Major storms in the UK not only damage our forests and woodlands, but impact on local economies and communities in those areas. This software is an excellent example of how the latest technologies and use of data can help us to protect our natural environment'

Forest Research estimates that over 11 million cubic metres of timber has been lost over the last 50 years as a result of <u>storm damage</u>. Using ForestGALES, managers can adjust the type of cultivation, timing of thinnings and the age at which trees are felled to make woodlands as wind resistant as possible.

ForestGALES 2.5 predicts most forest stands to be more stable than the previous versions and the accuracy of its estimates was verified against damage caused by a major storm that crossed Scotland in 2012.

Forest Research's head of tree stability research, Dr Bruce Nicoll said:

'ForestGALES is a world-leading forest wind risk tool and this new release is a major step forward in its development. The <u>storm</u> which passed through central Scotland in January 2012 was an opportunity to verify the predications of ForestGALES 2.5 and confirm its accuracy. This will provide forest managers with increased confidence that ForestGALES provides realistic estimations of wind risk that they can use to guide their <u>forest</u> management decisions.'



## Provided by Forest Research

Citation: Forest storm resilience improved with latest software (2015, October 7) retrieved 26 April 2024 from <u>https://phys.org/news/2015-10-forest-storm-resilience-latest-software.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.