i-Tree

Tools for Assessing and Managing
Forests & Community Trees

i-Tree: Assessing the environmental benefits of trees on golf courses

Presentation by Jonathan Griffiths, Arbrecare

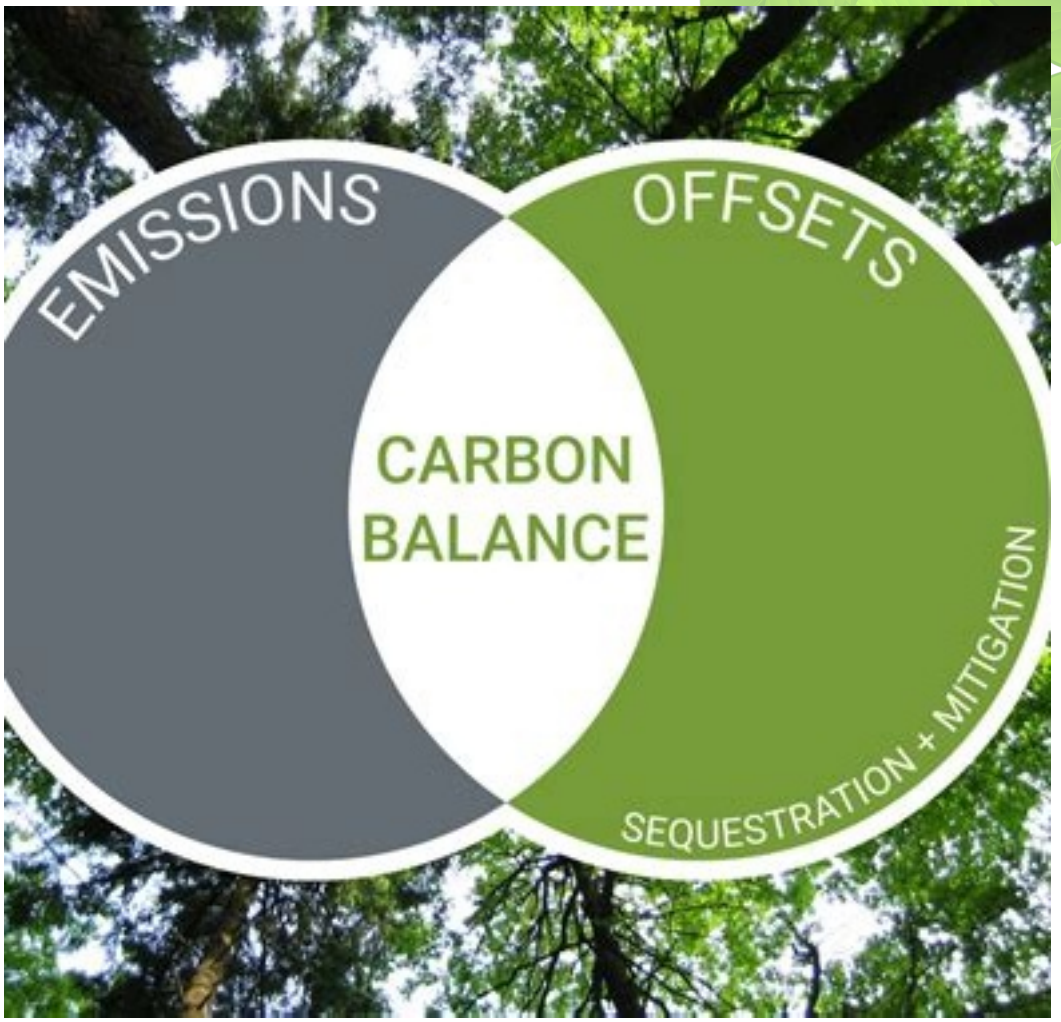
i-Tree - Towards Carbon Neutrality

- Paris Agreement - greenhouse gas emissions must decline by 43% by 2030

- La Stratégie Nationale Bas-Carbone - carbon neutrality by 2050

- Schéma régional d'aménagement, de dévelopement durable et d'égalité des territoires (SRADDET) - 27% reduction of greenhouse gases by 2030; 75% reduction by 2050

i-Tree detailed study provides tree sequestration data for the next 30 years



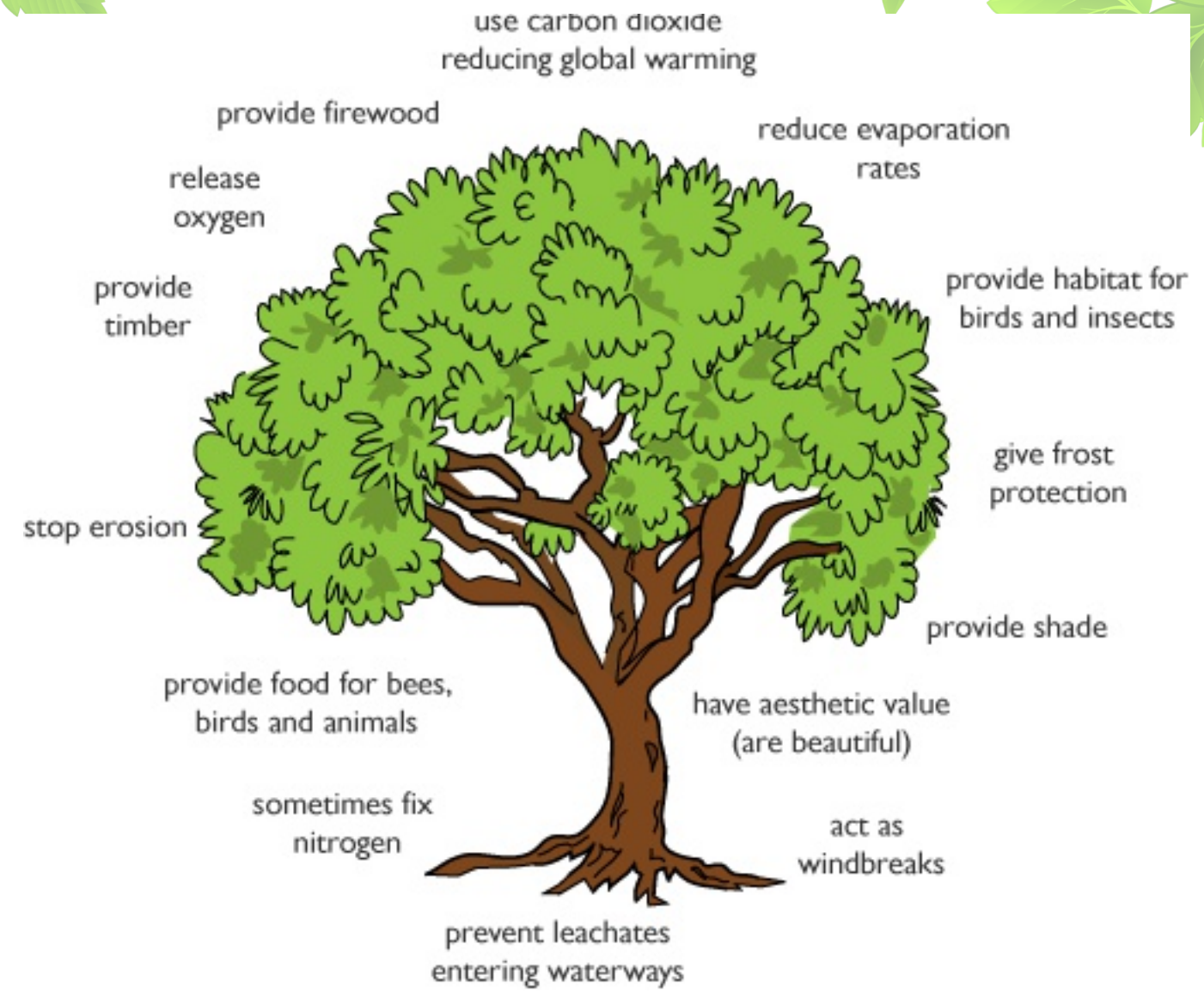
LABEL BAS CARBONE

GES
OBJECTIF 2050 : neutralité carbone

SRADDET
SCHÉMA RÉGIONAL D'AMÉNAGEMENT DE DÉVELOPPEMENT DURABLE ET D'ÉGALITÉ DU TERRITOIRE
PROVENCE-ALPES-CÔTE D'AZUR

The Benefits of Trees

- Remove carbon dioxide from the atmosphere
- Filter pollutants from the air
- Provide shade and passive cooling
- Prevent flooding and reduce run-off
- Lower stress levels
- Promote biodiversity



Why should I use i-Tree?

i-Tree

Tools for Assessing and Managing
Forests & Community Trees

- i-Tree is the most widely-used tool for tree evaluation in the world
- The i-Tree model provides accurate, scientifically-robust data
- i-Tree enables the financial and environmental value of trees to be known
- i-Tree provides a vital tool for achieving the goal of carbon neutrality

i-Tree - Application to Golf Courses

i-Tree is a scientifically recognised platform for the evaluation of the environmental benefits of trees

i-Tree allows a golf club to:

- Understand the **value** of its trees
- Improve **planning** decisions
- Promote a **positive image**
- Provide public **education**
- Justify **carbon offsetting**
- Improve its local and wider **environment**
- Contribute to the fight against **climate change**

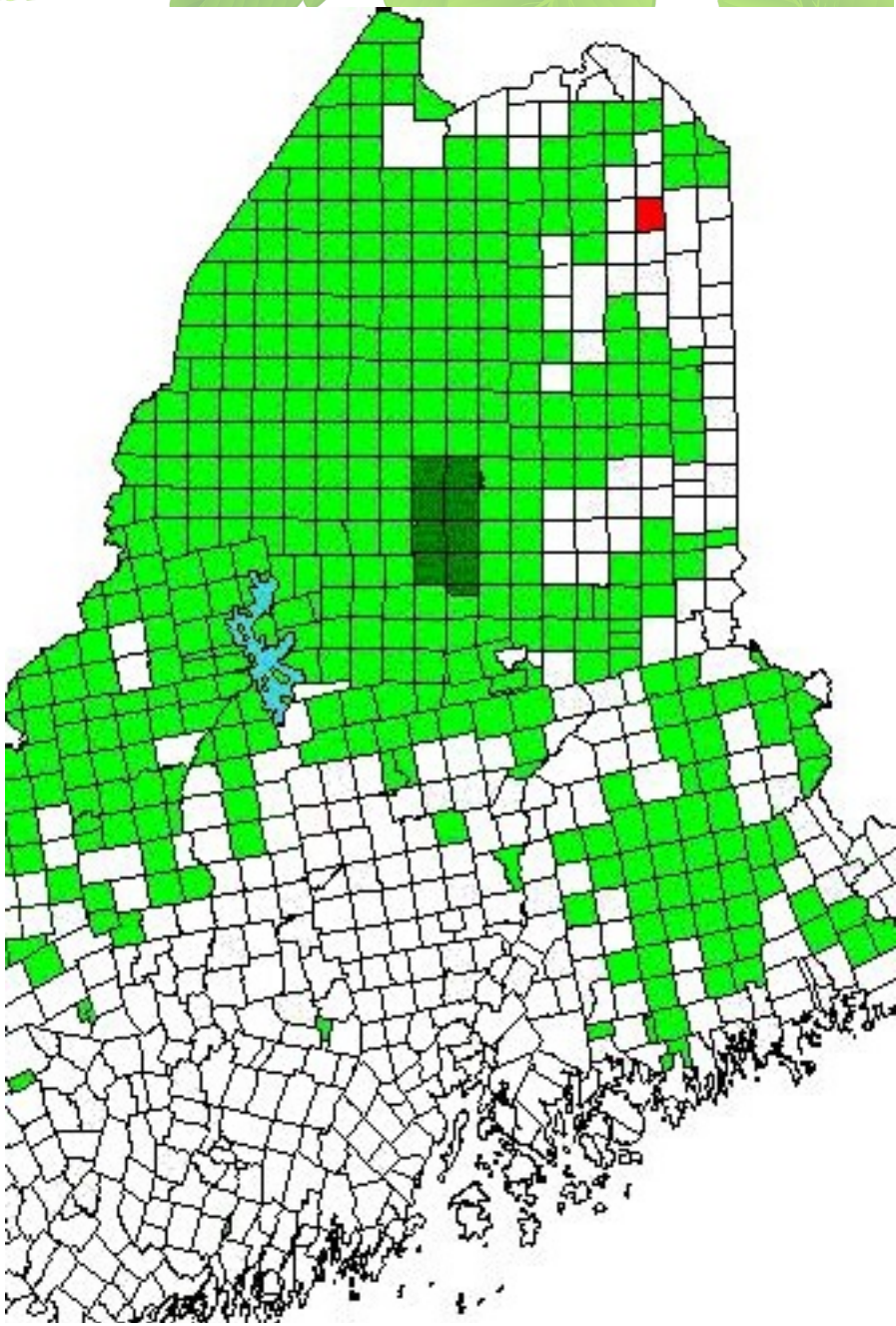
How is a survey undertaken?

i-Tree assessment is based on the collection of tree data via a survey

Ideally this will include:

- 250 plots
- Each plot 40 m²
- Spread equidistantly or randomized over terrain

i-Tree is quick, straightforward and relatively inexpensive



Tree Data Collection

Field data required:

Species

Height

Diameter

Location

Undercanopy

What does i-Tree provide?

i-Tree provides detailed, quantitative results for:

- Total amount of **carbon stocked** and its financial value
- Annual tonnage of **sequestered carbon** and its financial value
- Annual level of **air pollutant removal**
- Quantity of annual **oxygen production**
- **Hydrological** benefits

Case study: Villa Thuret, Cap d'Antibes

- Number of trees **196 of 300 trees**
- Canopy cover **13,9 ha**
- Carbon stockage **212,8 tonnes** **34 100,00 €**
- Annual carbon sequestration **4,2 tonnes** **687,00 €**
- Oxygen production **11,4 tonnes per year**
- Water runoff prevention **295 m3** **562,00 €**
- Pollution filtration **159 kg** **3 720,00 €**

Villa Thuret
Jardin Botanique

INRAE

Jonathan Griffiths, director of Arbrecare

- Jonathan Griffiths is the owner of Arbrecare

- Jonathan recieved his Diploma in Arboricultre at Merristwood, London, UK in 1986. He was a climbing arborist in the Botanical Gardens of Sweden before becoming a manager of the tree population in London for three years

- Arriving in France en 1991 he has developed a successful arboricultural business, covering all aspects of tree pruning, plantation and consultancy. He has worked with a number of important architects and landscape architects to help improve the standards of tree care in the region. He has continued his professional development through modules both here in France with INRAe and at Kew Gardens, UK.

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