

# NaturEtrade creating a marketplace for ecosystem services

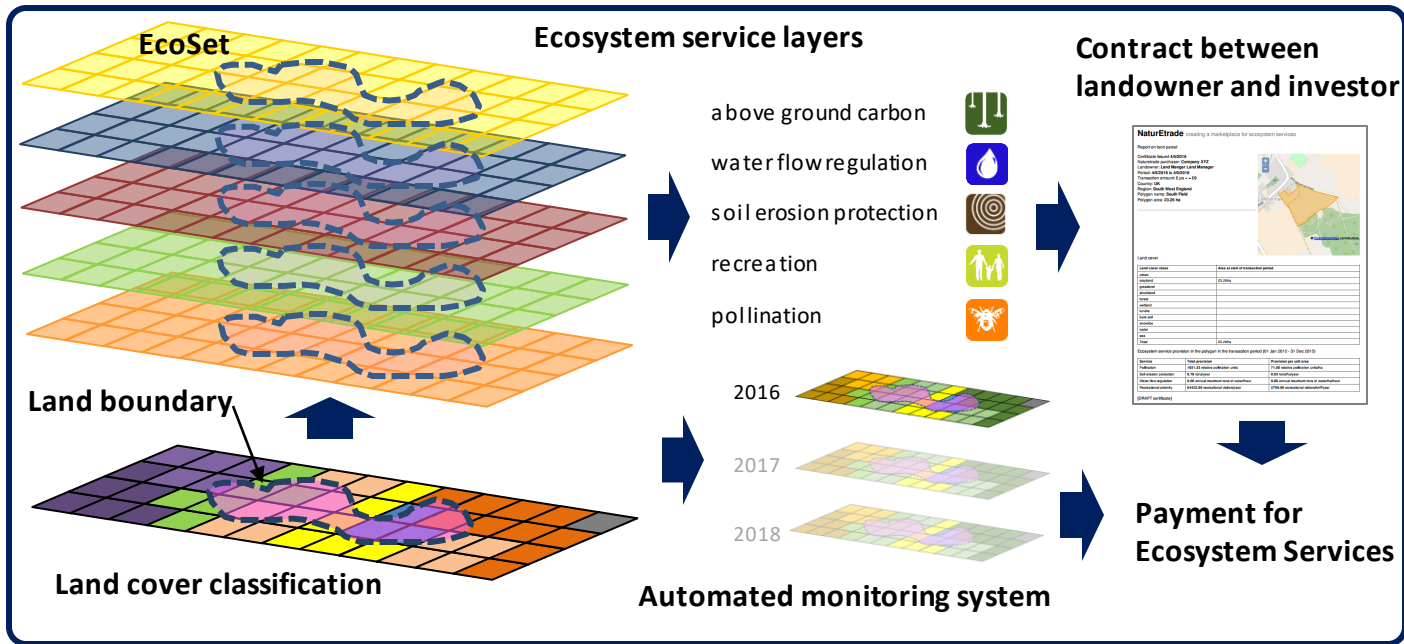
## About

Urbanisation and infrastructure changes in the EU degrade around 1500 ha of bio-diverse land each day, resulting in the loss of ecosystem services. These valuable services mitigate environmental change, support the sustainable use of natural resources and provide natural habitats.

Landowners are familiar with government grants to conserve biological and cultural features. However there is now a need for non-government Payment for Ecosystem Services (PES) schemes to be developed and mainstreamed.

## Aims

- Create a web-based system that enables landowners to assess their land's ecosystem services. These tools, based on complex science and generated via a super computer in Oxford, will be easy to use and information will be readily understandable.
- Establish a web-based trading platform to enable private and public sector investment to ensure supply of ecosystem services from European land.



## Coordinating organisation:

University of Oxford - [oxlel.zoo.ox.ac.uk](http://oxlel.zoo.ox.ac.uk)

The **Oxford Long-term Ecology Laboratory (OxLEL)**, headed by **Professor Kathy Willis**, provides robust ecological, socio-economic information that supports ecosystem planning, accounting, and reporting at local and national levels.

NaturEtrade builds upon the highly acclaimed Local Ecological Footprinting Tool (LEFT) – a decision support tool for evaluating the pattern of relative ecological value across a landscape.

## Associated organisations:

**Sylva Foundation** – [sylva.org.uk](http://sylva.org.uk)

Sylva develops web-based land stewardship systems which aim to provide land managers with environmental information and resources to support sustainable land management practises.

**Institute of New Economic Thinking (INET), University of Oxford** - [inet.ox.ac.uk](http://inet.ox.ac.uk)

INET is a multidisciplinary research institute dedicated to applying leading-edge thinking from the social and physical sciences to global economic challenges.



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## Landowners and managers

Create a free account and identify the land using the Land Registry's property boundaries.

your groups [find property](#) [help](#) [+ add group](#)

- Sylva Wood Centre [delete](#)
- South Field [PDF](#) [delete](#) [add polygon](#)

**Base Layer**

- OpenStreetMap
- Google Streets
- Google Hybrid
- Google Satellite
- landcover
- soil erosion
- pollination
- recreation
- water

Long Wittenham High Street Late Waterham Road Paradise Wood

© OpenStreetMap contributors

**Download ecosystem service information for an area of land**

## Investors - payment for ecosystem services platform (in development)

A trading platform will enable beneficiaries (investors) to search for ecosystem services on the NaturEtrade marketplace and pay landowners for the services derived from their land.

An online payment for ecosystem services system will provide a quick and secure basis for landowners and investors to create legal agreements.

Details will be provided of the five ecosystem services that are paid for by the investor and a schedule for the agreed payment to the landowner over the contract period.

[www.naturetrade.ox.ac.uk](http://www.naturetrade.ox.ac.uk)

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Report on land parcel

Certificate Issued 4/5/2016  
 Naturetrade purchaser: Company XYZ  
 Landowner: Land Manger Land Manager  
 Period: 4/5/2016 to 4/5/2016  
 Transaction amount: £ pa x - £0  
 Country: UK  
 Region: South West England  
 Polygon name: South Field  
 Polygon area: 23.26 ha

**Land cover**

Land cover class	Area at start of transaction period
urban	
cropland	23.26ha
grassland	
shrubland	
forest	
wetland	
tundra	
bare soil	
snowice	
water	
sea	
Total	23.26ha

Ecosystem service provision in the polygon in the transaction period (01 Jan 2015 - 31 Dec 2015)

Service	Total provision	Provision per unit area
Pollination	1651.33 relative pollination units	71.00 relative pollination units/ha
Soil erosion protection	0.78 tons/year	0.03 tons/ha/year
Water flow regulation	0.00 annual maximum tons of water/hour	0.00 annual maximum tons of water/ha/hour
Recreational amenity	64422.66 recreational visitors/year	2769.90 recreational visitors/km <sup>2</sup> /year

[DRAFT certificate]