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Pollards as guiding light - 75,000 volunteers provide landscape restoration and ecosystem services

La trogne en ligne de mire : 75 000 volontaires pour des territoires durables

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Abstract

Pollards in the Netherlands presents a short overview of the current situation of pollards in the Netherlands and the amazing role that volunteers play in their conservation. It ends by mentioning recent developments influencing the planting and management of pollard trees.

Résumé

Aux Pays-Bas, plusieurs milliers de citoyens-volontaires jouent un rôle majeur dans la conservation des trognes. Les politiques de développement influencent également la plantation et la gestion des trognes, au service d'un territoire durable.



(Fig.1) Pollard alders

[Link to access the presentation / Lien vers la présentation : http://www.agroforesterie.fr/colloque_trognes/Lex-Roeleveld-Robert](http://www.agroforesterie.fr/colloque_trognes/Lex-Roeleveld-Robert)

Introduction

The current situation of pollards in the Netherlands (and Flanders) is described in *Het Knotbomenboek* (translated by “The book of pollard trees”) (160p.), a book published in 2010 by Paul Minkjan and Maurice Kruk. Since then the situation has not much changed except for the increasing fatal impact of ash dieback disease. The Netherlands have a long tradition in using pollard trees. They can for example be seen on paintings by 17th-century Dutch masters, e.g. Paulus Potter (1653) (Fig.2).



(Fig.2) *Koeien in de wei bij een boerderij* ('Cows in a meadow near a farm').
Painting of Paulus Potter, 1653. Rijksmuseum, Amsterdam.

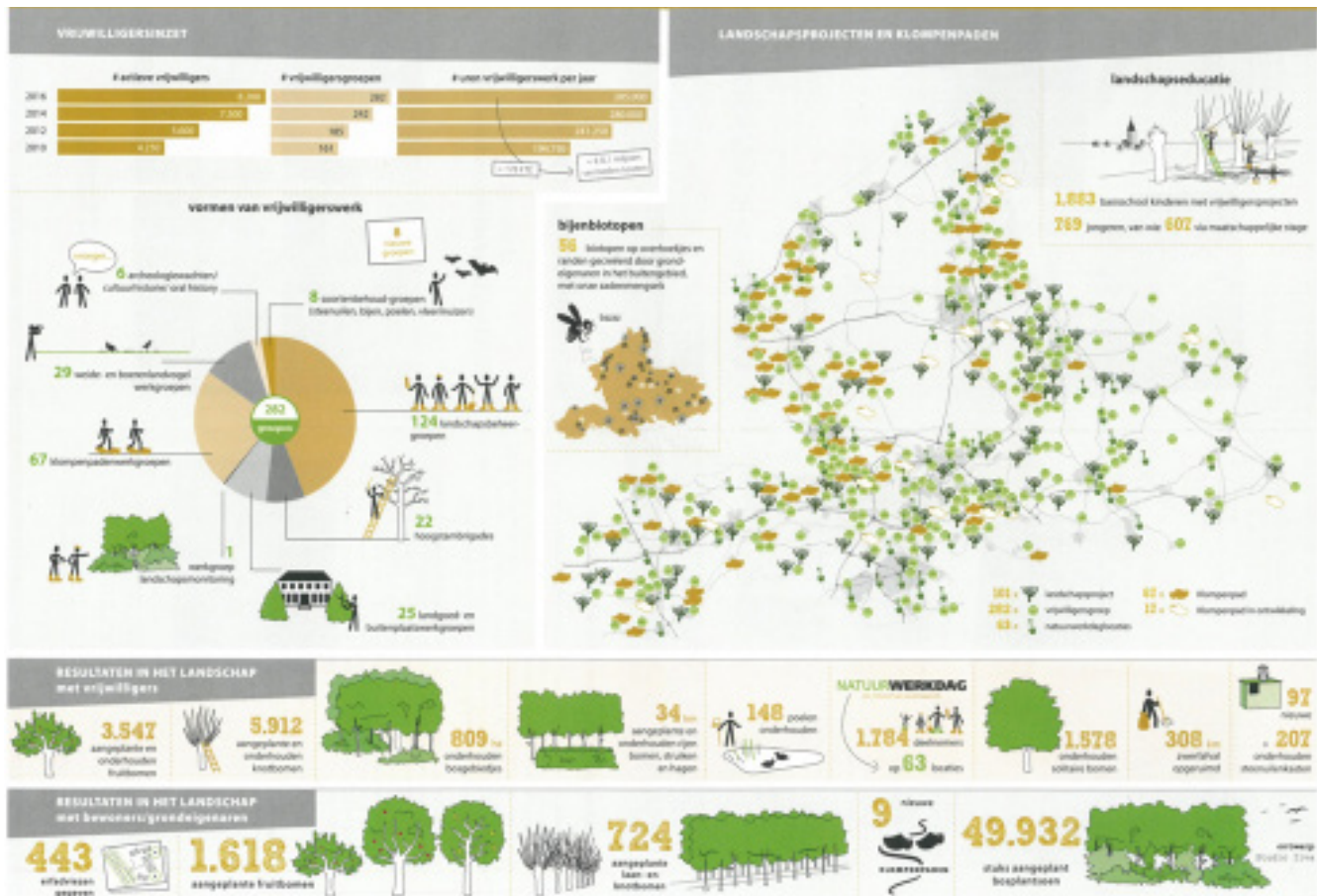
Minkjan en Kruk concludes that in the Netherlands we have roughly 400.000 old pollards. These are pollards that around 2010 were at least 15 years old. Since then many, mainly willow, pollards have been planted. We find pollards in large parts of the Netherlands in rows along roads, ditches and watercourses in polders but also in

hedgerows, on farm yards and gardens. The main species are willow (*Salix alba* and *S. fragilis*) and alder (*Alnus glutinosa*). Other species include ash (*Fraxinus excelsior*), commun oak (*Quercus robur*), poplar (*Populus spp.*), hornbeam (*Carpinus betulus*) and lime tree (*Tilia europaea*).

Since 1995 there has been a large increase in the number of pollards, mainly of willow. Water Boards, Public Works, municipalities and many individuals they all planted pollards. As many Dutchmen consider pollards to be pollard willows, the other species were largely forgotten. It is reported that the number of young pollard trees exceeds in some provinces the number of old pollards.

The role of volunteers in managing pollard trees

Pollarding is generally organised or carried out by the owners of the trees. However, a unique feature of pollard management in the Netherlands is the important role that volunteers play. An estimated 10-25% of all pollard trees in the Netherlands is managed by local groups of landscape volunteers. In general volunteers fulfil an important role in the management and conservation of the Dutch countryside and nature. Volunteers may be affiliated to organisations owning land and properties such as Staatsbosbeheer (Dutch Forestry service, the largest land owning organisation - <https://www.staatsbosbeheer.nl/>), Natuurmonumenten (The Dutch ‘National Trust’, 700.000 members - <https://www.natuurmonumenten.nl/>), or private estates. Many volunteers are, however, part of informal local groups. Sometimes they have a legal status as a foundation, but many of them just call themselves a working group. The main motivation of these volunteers is the conservation of our countryside, of its biodiversity and cultural heritage.



(Fig.3) Abstract annual report Stichting Landschapsbeheer Gelderland, 2016.

The role of volunteers will be illustrated using 2016 data from the province of Gelderland (Fig.3). Gelderland lies in the heart of the Netherlands, roughly 5,000 km², 2 million inhabitants, 53 municipalities with Arnhem (155,000 inhabitants) as its capital. Gelderland is a largely rural province. The infographic illustrates the number of unaffiliated voluntary groups and the activities they conducted.

The pie diagramme indicates that in 2016 the province counted 282 local groups with altogether 8.200 members. The smileys on the map (right side of the infographic) show us that voluntary groups are present all over the province. Their activities are manifold. Out of the 282 groups, 124 are referred to as landscape groups. Pollarding is during the winter months one of their principal activities. Other groups may be specialized in pruning ancient orchards (22), in species conservation ⑧, bird watching and protection (29) or managing public, rural footpaths (67). Almost 2.000 children from primary schools have been involved in some sort of landscape educational activities in 2016. These figures are not very different in other parts of the Netherlands and express the strong motivation and important contribution of the volunteers in the Netherlands. The bar diagramme (top-left) shows the annual growth in the number of groups and volunteers.

How does a group pollarding trees organise its work? Every year the group selects rows of pollards and will contact the owner. Usually they will select trees that show signs of neglect. The group will contact the owner (somebody of their community) and ask for permission to pollard the trees. The owner should cooperate as the wood will have to be chipped and the fence sometimes repaired. Volunteers may take some firewood back home. The group makes her annual planning and will in most cases meet once every two weeks on Saturday. Most groups use hand tools only. Group members bring their tools, coffee and cake and start working in the morning ending the work around noon or early in the afternoon. Altogether they will meet during the winter period (1st of November – 15th of March) 5-10 times. The infographic shows that in 2016 these groups pollarded and planted a total of 5.912 trees. If well maintained, willow and alder pollards are cut every 4-6 years.

The volunteers are not paid for their work. In every province these groups are however supported by a provincial landscape organization. These organizations, co-funded by their provincial administration, support local voluntary groups by providing them with training, technical and organisational advice and the necessary tools. Landschapsbeheer Gelderland (www.landschapsbeheergelderland.nl), the provincial organization in Gelderland (Fig.4), for example owns over 20 trailers equipped with tools, ladders etc. which can be used free of charge by local voluntary groups. The infographic shown is part of the Abstract annual report by Landschapsbeheer Gelderland (Jaarbericht, 2016). Every year at the 1st Saturday of November, the new season is kicked off during the National Nature working Day (<http://www.natuurwerkdag.nl/index-home.php>). This day is organised by the joint provincial landscape organizations and aims among others at attracting new volunteers. In total an estimated 75.000 volunteers provide, free of charge, landscape services in the Netherlands such as pollarding and planting trees, controlling invasive species such as *Prunus serotina* and implementing bird protection measures.



(Fig.4) Volunteers pollarding willows

Hedge laying in support of pollard trees

Hedge laying is an ancient craft meant to make hedges livestock proof. It's re-introduction in the Netherlands

started in 2003. The interest in laying hedges has grown over the years. Hundreds of people have followed a course, a new generation of professional hedge layers has developed and the annual competition is visited by thousands of spectators (Fig.5). Many people are very passionate about this craft. Pollard trees are an important element of Dutch hedgerows. Hence the re-introduction of hedge laying has resulted in more attention paid to the management and planting of hedgerows and pollard trees by professionals and volunteers alike.



(Fig.5) Spectators in discussion with participant annual hedge laying competition



(Fig.6) A cow behind a laid hawthorn hedge. Background left: young pollard ash

Recent developments

Two recent developments start to have an impact on the role and management of pollard trees in the Netherlands.

Pollards for natural agriculture:

Natural agriculture, of which permaculture and food forests are the best known expressions, is gaining popularity in the Netherlands. It is a response to the ecological crisis caused among others by conventional agricultural practices. In natural agriculture perennials such as trees and shrubs play a key role. The Netherlands hedgerow foundation runs a tree planting programme (Stichting Heg&Landschap) delivering annually 50.000 saplings. Initially the interest was mainly in planting hedges and windbreaks, but the last few years there is a shift towards natural agricultural practices. Pollards do play an important role in this multi-strata form of agriculture. Increasingly farmers wish to experiment with pollards as fodder trees. Pollards can fulfil many other functions in this environmentally sound form of agriculture such as providing food, energy, support of climbers, shade, nutrient pump, etc. (Fig.6)

Innovation in management planning and learning

In efforts to improve hedgerow management in the Netherlands a digital programme has been developed to survey landscape elements such as hedges and trees. The programme includes the possibility to formulate management measures for every individual element, adjust them whenever necessary based on the monitored results. Pictures of the elements are included as well. The programme results in efficient planning of our hedgerow and tree management.

It also offers us the possibility to monitor the impact and to improve and fine-tune our management. This helps among others in improving management of ancient pollard trees of which our understanding falls short. As we do not possess massive amounts of old pollards of species such as ash, oak, hornbeam we are eager to know more about whether or not to pollard, whether to phase the cutting of pollard trees and if so how? The programme called BOOM (meaning tree in Dutch) is of great help. The programme is furthermore user friendly and allows for a bottom-up approach by incorporating experiences from field workers whether professionals or experienced volunteers (<http://www.boomapp.nl/>) (Fig.7).



(Fig.7) Farmers experiment with fodder trees

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