

Stichting Apeldoorns Kanaal

Leliestraat 2

7151 GJ Eibergen

www.apeldoornskanaal.com

Presentatie Wereld Kanalen Conferentie

Groningen, 24 sept. 2011

(Copyright Stichting Apeldoorns Kanaal)

- = Dia (zie WCC presentatie)

The Apeldoorn Canal – a new life for a Royal waterway

- The Apeldoorn Canal Foundation presents....
- The Apeldoorn Canal – a new life for a Royal waterway
- Location of the Apeldoorn Canal

Part 1 - Brief history of the Apeldoorn Canal 1825-1972

Waterways have been the most important transportation routes in the Netherlands for a long period of time. Centuries ago country roads usually were not paved and of poor quality, sandy in summer, muddy during wintertime.

Areas with a lack of water, such as the Veluwe Region, were therefore hardly accessible.

- Canal builders

In 1815, during the reign of King Willem I, plans were made to dig a new waterway from the village of Apeldoorn to the river IJssel near the city of Hattem to develop the Veluwe region. In 1825 digging started. Spade and wheelbarrow were all but the only tools in digging the canal and hundreds of diggers had to be employed. The length of the canal was 33 kilometres. The canal works were mainly financed by the King himself.

- Canal digging
- Map of the Grift Canal

The canal's dimensions were modest. Five simple wooden locks had been built to overcome the difference in height of 12 metres between Apeldoorn and Hattem. Only barges up to 50 tons could pass these locks. Moreover 26 wooden draw-bridges were built across the canal. The Kayers brook in Apeldoorn mainly met the canal's water supply.

In Apeldoorn, where the canal came to a dead end, a small harbour was built.

- Port of Apeldoorn 1830

The official opening of the new canal took place in April 1829.

Next, regular shipping services were started to and from the ports of Amsterdam and Rotterdam.

The ships carried peat, brick, gravel, grain, tatters for the paper mills, timber from the forests, coal and even furniture for the Royal Palace near Apeldoorn.

The transportation of freight did, however, not meet the expectations and the exploitation of the canal was not a financial success, as the wooden locks and bridges demanded a lot of maintenance.

Between 1859 and 1865 the canal was lengthened to the South, to the village of Dieren on the river IJssel. It was expected that doing so, profits could be improved.

- [Map of the canal Apeldoorn-Dieren](#)
- [Canal diggers](#)

Near Dieren a three-rise staircase lock was built to overcome the difference in height of approximately 10 metres to the river IJssel.

- [Three-rise staircase lock Dieren](#)

In a country not known for its hills, this was, not surprisingly, the only lock of its kind ever built in the Netherlands, allowing vessels up to 200 tons to pass.

Next there were problems with the water supply of the canal. After digging had been completed only 70 cm of water was available in the canal groove. For reasons to save money, the canal was dug above the level of the ground water and so the water leaked away. Only after additional water supplies had been dug, the problems were mostly solved.

- [Digging water supply](#)

By the end of 1868 this part of the canal was finally opened to navigation. The united canals together got the name Apeldoorn Canal.

After some time, vessels were increasingly hindered by the limited dimensions of the canal in the Northern section. In 1878, restoration works were started.

The five old wooden locks were rebuilt in brick and got the same dimensions as the locks in Dieren.

- [The new Koudhoorn lock in 1880](#)

The passage of the bridges was widened and the canal was deepened. After the works had been completed the whole canal was navigable for ships up to 200 tons.

As from 1876 the canal had to compete with a new railway, more or less parallel with the waterway. Yet the canal has significantly contributed to the economic development of Apeldoorn and the region.

- [Port of Apeldoorn](#)
- [Hezenberg lock 1930](#)
- [Towing horses drivers](#)
- [Apeldoorn – unloading steamship “Apeldoorn 2”](#)

In 1929 the centennial of the Grift Canal (the Northern section) was celebrated in a great way.

- [s/s “Inspecteur Rose”](#)

On August 1st the steamer "Inspecteur Rose" departed from Hattem for a trip to Apeldoorn with many officials on board.

- Officials

During the Second World War the canal was heavily damaged.

- Blown-up bridge across Dieren locks

In May 1940 the Dutch army blew up all bridges in an effort to slow down the German advance. During the war most bridges were repaired or renewed. In April 1945 the bridges were destroyed once more, now by the retreating German forces.

- Blown-up Olst bridge

Moreover the enemy troops caused significant damage to the entrance locks at Hattem and Dieren, while dozens of ships in the canal were sunk.

- Ships in an empty canal section

A lot of work had to be done to repair the damages, but in 1946 the entire canal was back in use.

- Clearing away debris in the canal

In the years after the Second World War trade and industry gradually switched over to road transportation and navigation decreased rapidly, especially in the Northern section..

- m/v Apeldoorn V
- Collage Hezenberg lock

Plans were made to enlarge the Northern section of the canal, but the cost were too high and finally this part was closed to navigation in 1962.

- Map closing Canal North
- Klooster roller bridge

Navigation in the Southern section, from Dieren to Apeldoorn, however, increased.

- Collage thee-rise staircase lock at Dieren

So from 1954 plans were made to enlarge this section of the canal. A new entrance lock was built as a single deep chamber to take 600 ton barges. The new lock was opened to navigation in 1957.

- New entrance lock Dieren, 1957

Later on new investigations were made about the benefits of enlarging the canal.

- Ice-breaking ship Canal-South

They turned out to be negative and eventually it was decided to stop enlarging the canal and also to close down this section in 1972.

- **Map closing Canal South**
- **Extinguished signal lights**

And so after 143 years there came an end to navigation on the Apeldoorn Canal and the signal lights were extinguished.

Part 2 - period after closing the canal (1972-1995)

- **Part 2- period after closing the canal (1972-1995)**
- **Collage deserted canal**

Rather soon after the closure, the canal was permanently blocked by the conversion of moving bridges into low level fixed bridges, the building of a couple of dams and other obstacles like the low bridge in the new motorway A50.

During the next decades the canal, locks, bridges and quays gradually fell into decline as no maintenance was carried out anymore.

It was a pity that hardly nothing was done to preserve one of the finest examples of our national canal heritage.

Fortunately in 1995 some people took the initiative to do something about the canal.

Part 3 - Initiatives, plans, investigations, reports... (1995-2011)

- Part 3 - Initiatives, plans, investigations, reports...
(1995-2011)
- The Apeldoorn Canal Foundation

The Apeldoorn Canal Foundation

The Apeldoorn Canal Foundation was established in 1998 and has set itself as target to reinstate the Apeldoorn Canal in its former glory by re-establishing its historical function and make it navigable again to recreational craft and ships of the maritime heritage. In doing so it will be taken into account the importance of the Apeldoorn Canal as a maritime monument, a waterway of value.

Until the re-opening of the canal, the Foundation will busy itself with implementing all things necessary and conducive, in revitalising the adjacent area of the canal and in water conservation. Ecologically, the area is so important that protection, conservation and repair of environmental values are imperative.

The Foundation tries to achieve its goals by:

1. *Promoting and creating support in the broadest sense of the word, by means of publications, presentations, initiating proposals and lobbying to convince both politicians and the public. An investigation some years ago showed that nearly 80 percent of the local residents are in favour of a navigable canal.*
2. *By trying to raise funds from the European Union, the central government, provincial government, the Waterboard and the municipalities along to the canal in order to meet the cost of the preparatory phase and further implementation.*
3. *By working closely together with all regional actors*
4. *By monitoring developments in the canal area*

Throughout the years a number of studies have been carried out to investigate how to make the canal navigable again.

To co-finance these studies with subsidies from the European Union, the Foundation has maintained contacts with other European canal authorities, such as British Waterways and NGO's. British canal volunteers have visited the Apeldoorn Canal a couple of times. During these meetings a lot of experience and knowledge was exchanged.

- British and other Dutch canal volunteers visiting Apeldoorn
- British and other Dutch canal volunteers visiting Hezenberg lock
- Dia

1. 2001 Feasibility Study, "Conservation through Navigation".
It showed that the canal could be made navigable again, but the cost were considerable.

2. 2009 Update Feasibility Study, called “The Apeldoorn Canal: Favourable Water”.

3. 2010 Report and Agenda for Regional Development, called “The Canal back into focus”, carried out by the province of Gelderland.

This last report also covers the necessary dredging of the canal section from Hattem to Heerde and the development of the adjacent area as a preparatory phase into transforming the canal back into its old glory.

- **Facts and figures**

Both in and across the Apeldoorn Canal there are 65 locks, bridges and 4 dams.

At first look this seems quite a large number. However, in the past years lots of work have already been done and considerable investments have been made to restore navigability in term.

Eight bridges have already sufficient headway clearance not to impede recreational traffic.

During the past four years the Waterboard Veluwe, the present owner of the canal, restored already four of the five historical locks in the Northern section of the canal.

The restorations were carried out in such a way that the locks can be used again to let boats pass.

At the moment already 20 percent of all existing obstacles is passable. Moreover 7 existing bridges have already been prepared for future movability.

In the past years some 11 million Euros have already been invested into restoring the canal's navigability.

- **Restoration works Hezenberg lock**

In July 2007 the Hezenberg lock from 1872, was the first lock which was officially re-opened by a more than 100 years old barge.

- **Official re-opening Hezenberg lock**

Part of the canal (about 5 kilometres) is now already navigable again, from the river IJssel at Hattem to nearby the small village of Wapenveld.

The city of Apeldoorn, the most important municipality along the canal, is working gradually to develop the canal area. In the past years the quays of the old harbour were restored and a new residential area was built along the banks of the canal, a former industrial area.

- **Restored quays in the port of Apeldoorn**

Part 4 – Major physical obstacles

As I told you before, there are a lot of obstacles in the canal, most of them local low fixed bridges, but also some major ones.

- Major physical obstacles
- Motorway A50
- Circular roads in urban Apeldoorn
- Railway bridge in Dieren
- A50

Passage of motorway A50.

One of the main obstacles is the bridge in the motorway A50. There are several technical solutions to solve this problem and make the bridge passable to navigation.

- The bridge could be raised by approximately 2, 00 meters
- Build an aqueduct

We should like to hear from you if you have any innovative ideas to cope with this problem.

Part 5 – State of affairs – September 2011

- Part 5 – State of affairs September 2011
- State of affairs September 2011
- Working-out Agenda for Regional Development
- Plans for dredging 10 kilometres from Hattem to Heerde
- Restoration last historical lock in progress
- Investigation to transform 6 fixed bridges into moving ones
- Investigation restoration Southern entrance lock
- Investigation passage motorway A50
- Official re-opening Koudhoorn lock, June 2011.
- The Apeldoorn Canal – a waterway of value
- The End