

Number of End of Life Boats (ELB) and waste material flows in the Netherlands

English summary of Dutch report by WA Yachting Consultants, 21 January 2015.

Introduction

Recent media coverage has brought attention to the dramatic increase in boats that are no longer 'fit for use' – end of life boats (ELBs) – and the associated problems with their disposal. Steel and wooden boats invariably retain a decent scrap value, but this is not the case for polyester constructions – which make up about 60% of recreational crafts in the Netherlands. Abandoned polyester boats could become a threat to the environment.

Dismantling Yard 't Harpje supported by the Ministry of Economic Affairs, the Netherlands Yacht Building Industry (NJI), HISWA Holland Marine Industry and the Royal Dutch Yachting Union (KNWV) have started a project to investigate the scale of the problem. Research and reporting have been provided by WA Yachting Consultants, a private consultancy that has published various reports on yachting and yachting development in the Netherlands and abroad.

1. Trends in the Netherlands

The yachting population of the Netherlands is aging. A recent survey discovered that the percentage of owners over 50 for visiting yachts in marinas (mostly cabin yachts) has risen from 35% in 1993 to 63% in 2002 and 74% in 2013. After a boom in the number of yachts in the seventies and eighties, statistics show a steady decline starting from 2003 onwards. First in the number of visiting yachts in marinas, followed by a drop in berth holders.

The fleet is also aging. In a recent survey, nearly 50% of all cabin yachts were found to be more than 35 years old. In terms of materials, a survey in 2005 reported that 48% of recreational crafts were made of steel, 44% polyester and 8% wood.

Occasionally boats in the water and on land are abandoned if the owner can no longer make use of them. As we have no boat registration regime in the Netherlands, there is little culpability for owners and the phenomenon of 'orphan boats' has already begun.

There is also currently no organised collection structure for ELBs in the Netherlands, and there is a fee for disposing of polyester boats. Therefore there is little incentive to deter owners from abandoning their boats. Also, the Dutch yachting industry has no regime for the reuse or recycling of used boat materials or components.

In view of the growing problem of ELBs, WA Yachting Consultants has been requested to:

- survey the number of recreational crafts in the Netherlands
- estimate the total (material) weight of the Dutch recreational fleet
- estimate the future flow of waste material
- survey the current ELB problem in Dutch marinas
- interview governmental authorities and water boards on the ELB problem in public waters.

2. Number of recreational crafts in the Netherlands

2.1. Boats in water

The total number of boats in the water (for a detailed breakdown per province, please see the full report):

Number of boats in marinas or other harbours	154,000
Number of boats berthed in water at private homes and in canals	43,500
Total boats in water	197,500

The composition of this fleet:		Average length [m]
Sailing yachts with cabin	78,000	9.2
Open sailing boats	21,500	6
(Traditional) Flat bottom yachts	5,000	9
Cabin motor cruisers	59,500	9.4
Open motor boats	26,500	5.8
Other crafts	7,000	4.5

Based on statistical data an assumption could be made on the total weight and various materials of the above categories. For details see Annex 1 (page 21 of the full report).

2.2. Boats stored on land (regularly used)

Boats that are regularly used while stored on land tend to be smaller and lighter and put in the water either by hand, crane or via a slipway. In this survey catamarans on the beach and windsurf boards were also taken into account.

Total regularly used boats on land	210,300
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The composition of this fleet:	
Sailing boats (incl. regatta fleet)	44,500
Rowing boats	6,500
Canoes	30,000
Small motorboats incl. jet skis and dinghies	98,000
Surfboards	31,300

2.3. Boats stored on land (out of use)

The number of boats that are no longer used and stored around houses, in garages and sheds is estimated at around 100,000. These are mainly small boats, canoes and surfboards. As this is part of the existing ELB problem, the material weight of this category has also been estimated.

Total boats stored on land and not used	100,000
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The composition of this fleet:	
Small sailing boats, motor boats and rowing boats	15,000
Canoes	15,000
Surfboards	70,000

2.4. Total number of boats and weight of the Dutch recreational fleet

The total number of recreational boats in the Netherlands comes to just over 500,000. The total weight of the Dutch recreational fleet is estimated at 900,000 tons. Based on the categories mentioned above, an estimation of the total weight of material involved that will eventually need to be scrapped and recycled (see table in chapter 4.2 below) has been made.

3. Survey of marinas and club harbours

Marinas and yacht club harbours were approached with a questionnaire to establish if and to what extent they are already confronted with the ELB problem. The results include:

- 91% of respondents recognise the ELB problem
- 88% know of berth holders that no longer use their boats
- 88% receive complaints about the maintenance status of neighbouring boats
- 34% have taken action by cleaning boats themselves (cost charged to the owner)

- 72% have experience with outsourcing the process of collecting overdue berthing fees
- 31% have hired a process-server to expropriate a boat
- 41% have been offered a boat by the owner to pay for outstanding berthing fees
- 34% have actually dismantled and/or disposed of 'left behind' boats

4. Number of End of Life Boats

4.1. Short term

Based on these surveys the prediction for the coming five years is that some 6,000 boats that are currently berthed in the water will need to be dismantled and disposed. On top of that there is a current fleet of 100,000 boats that are not used anymore, are awaiting disposal and will not be removed until an effective and attractive disposal regime is made available.

4.2. Long term

The expectation is that, once an effective disposal system is in place, a reasonably steady flow of boats will require dismantling. This study estimates that in the next five years 2.5% of the recreational fleet will require dismantling (12,500 boats), followed by 5% of the fleet between 2020-2025 (25,000 boats) and 7.5% between 2025-2030 (35,000 boats). This increase is based on:

- the average age of current boat owners
- the lack of interest and financial capacity that appears to exist for younger generations to own a boat.

Based on these assumptions the material flow prediction is:

	Total weight	0-5 years	Weight	5-10 years	Weight	10-15 years	Weight
Hulls:							
- Steel	264,035	2.5%	6,601	5%	12,872	7.5%	18,342
- Polyester	286,286	2.5%	7,157	5%	13,956	7.5%	19,888
- Wood	19,824	2.5%	496	5%	966	7.5%	1,377
Engines	64,616	2.5%	1,615	5%	3,150	7.5%	4,489
Keels	130,885	2.5%	3,272	5%	6,381	7.5%	9,092
Other	134,279	2.5%	3,357	5%	6,546	7.5%	9,328
Total weight [t]	899,925		22,498		43,871		62,517

5. Conclusion

The ELB problem already exists and needs immediate attention.

The number of End of Life Boats that will be scrapped in the short term will be strongly dependant on the availability of a dismantling infrastructure.

As long as a situation exists that payment is needed for disposal of polyester boats, the number of orphan boats will likely increase.

A PDF of the original report (in Dutch) can be downloaded via www.wa-yachtingconsultants.com.



www.wa-yachtingconsultants.com



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