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Ministerium für Wirtschaft, Energie, Industrie, Mittelstand und Handwerk des Landes Nordrhein-Westfalen

Fish and Ships: Is there a pattern of injuries? Are there indications for ship propeller-induced injuries

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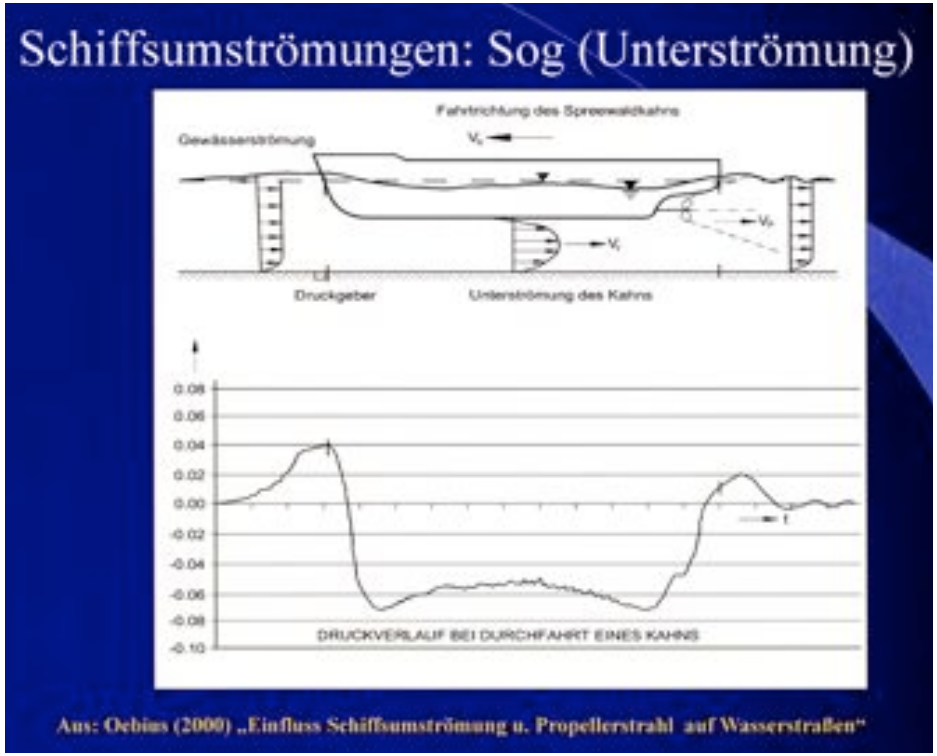
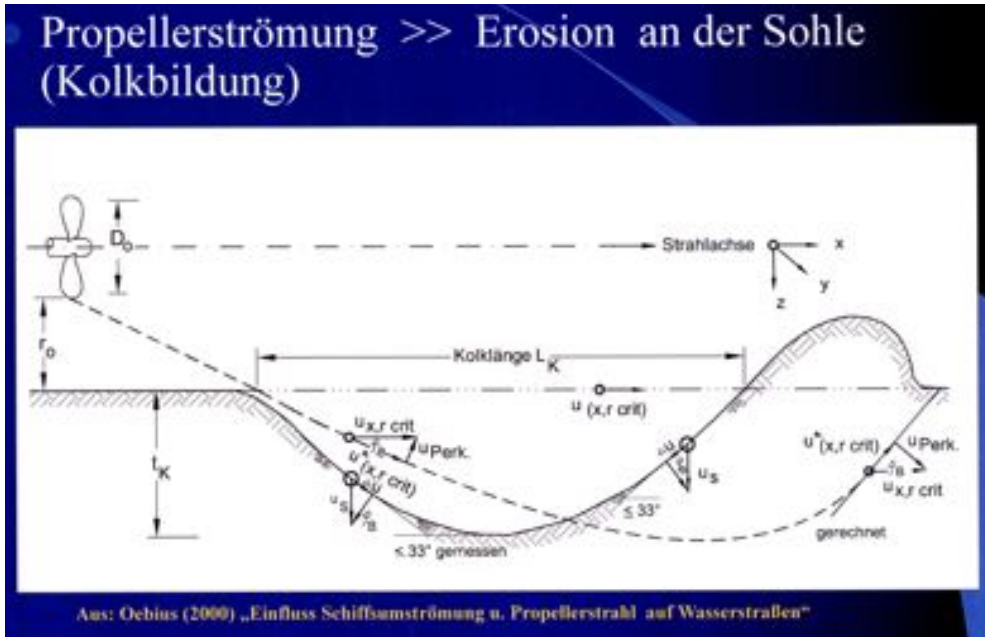
Low flow conditions in the river Rhine:

- The navigation channel is the only refuge left for large fish as they avoid shallow water.
- Eels abandon the stone layers along the shoreline.
- The likelihood to get hit by a ship propeller increases substantially at low flow conditions.





Ships influence the flow patterns, create eddys and erosion of the river bed (Oebius, 2000, in Hennings, 2007)

Often observed patterns of injuries: the gill cut

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Often observed patterns of injuries: the gill cut

Also observed patterns of injuries: gill cut and tail cut

Also observed patterns of injuries: central body cut

Questions:

Are the presented injuries a valid indicator - or even evidence - for ship propeller induced traumata?

What is the possible course – e.g. is the gill cut typical for fish getting sucked into the eddy of a ship propeller?