

Age estimation of the plaice from eastern English Channel and southern North Sea

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Plaice
Pleuronectes platessa

Plaice is found in the North East Atlantic, from Greenland to Morocco, including White, Black and Mediterranean Seas.

This benthic-demersal fish lives from the coast to depth of 200 metres, essentially on sandy, gravelly, muddy substrata.

Plaice acquires its sexual maturity between 2 and 7 years old and its longevity is estimated at 50 years.



Concave et convex sides of the otolith

Preparation and observation technique :

Otolith is directly read (*in toto*) without any preliminary preparation. Its observation is realized under a microscope after immersing the whole on its convex side in an alcoholic solution.



Preparation and observation technique:

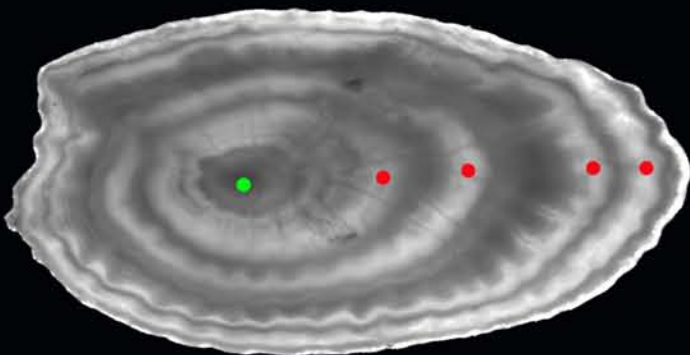
Otolith is embedded in resin, then cutted along its dorso-ventral axis in thin section, which is observed under a microscope to estimate the age.



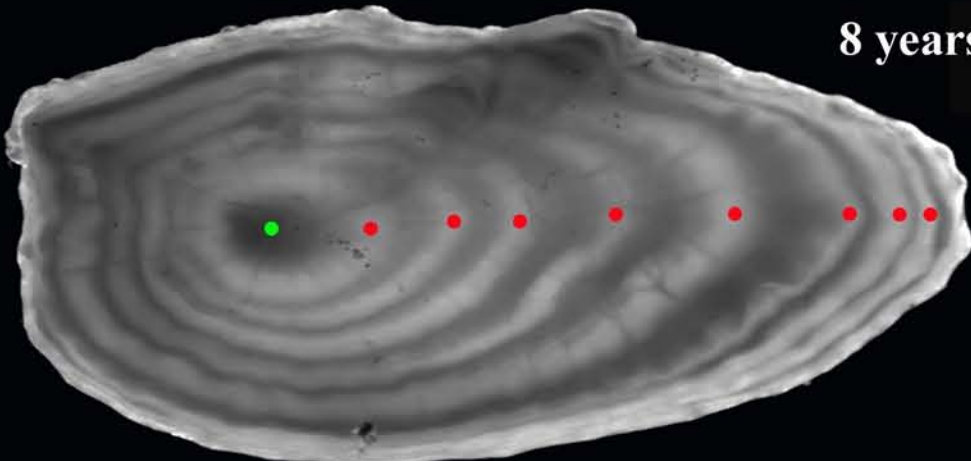
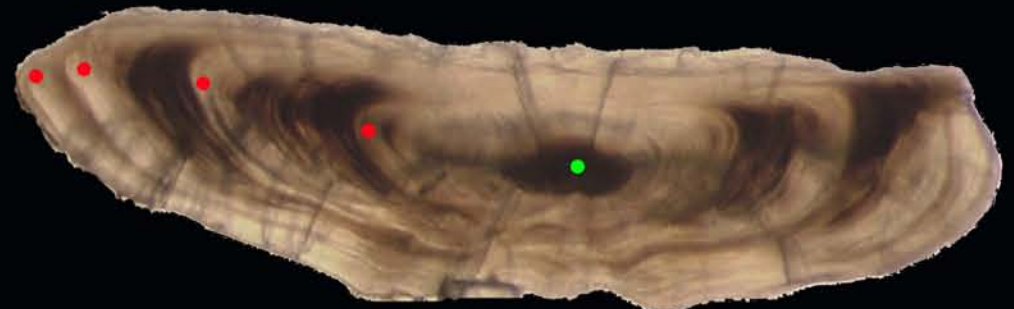
Dorso-ventral cut



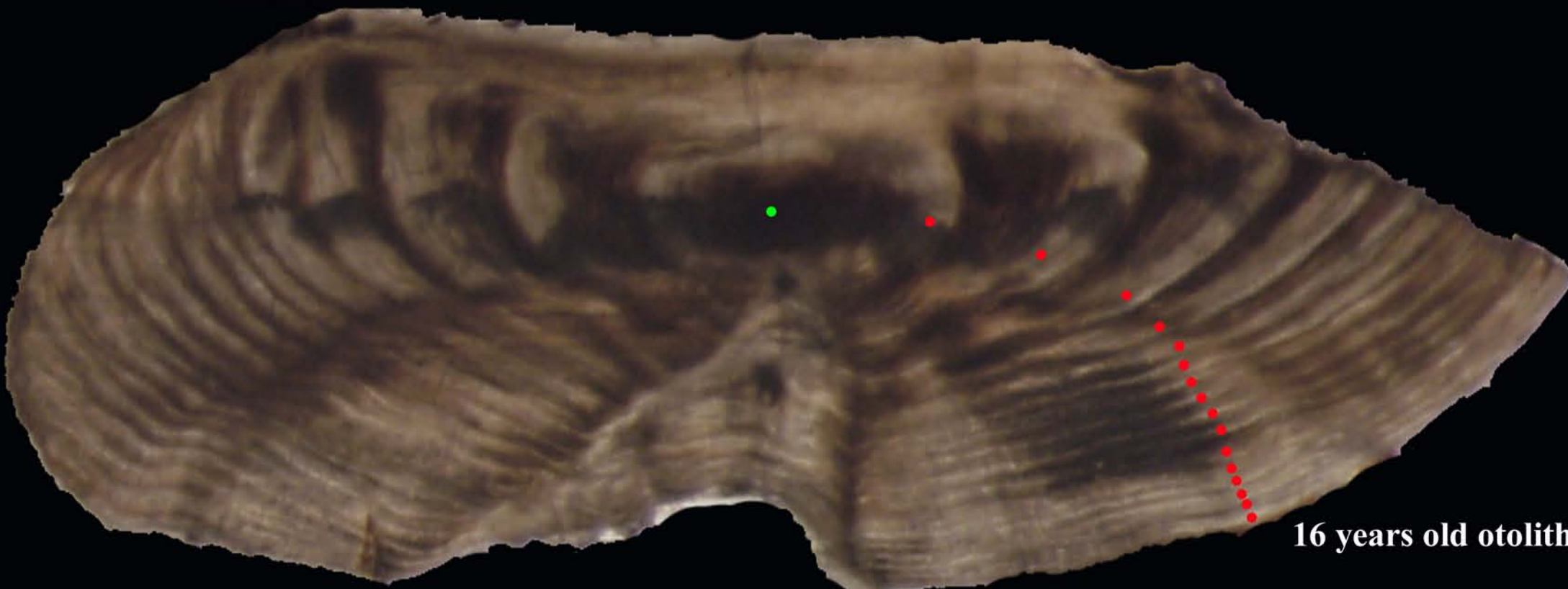
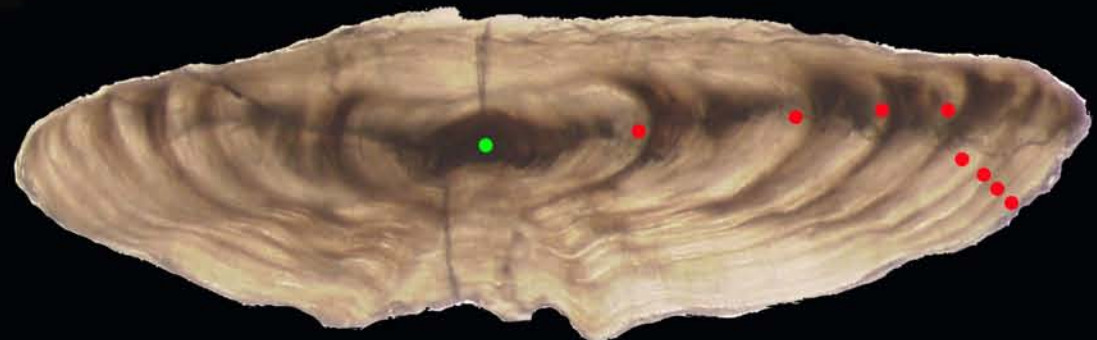
High speed diamond saw



4 years old otolith



8 years old otolith



16 years old otolith

At present, age estimation of the plaice is realized from thin sections instead of entire otoliths, which allow a stronger accuracy, especially in case of young plaices.