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# Stellingen

## Behorende bij het proefschrift 'Tools and Triggers for Eel Reproduction'

door Erik Burgerhout

1. Based on cost of transport farmed male silver eels swim more efficiently in groups than individually (This thesis).
2. Swimming exercise alone does not induce maturation in farmed male silver eels (This thesis).
3. Eel genomics are a useful tool for applications in eel aquaculture (This thesis).
4. During artificial reproduction of eels, the relative change in blood plasma level of  $17\beta$ -estradiol is a reliable indicator to distinguish responders from non-responders (This thesis).
5. Eel egg quality will most likely be improved by the reduction or replacement of the physiological stressors, which result from the weekly hormone treatments (This thesis).
6. Hybridization of an eel species with a long maturation trajectory (e.g. *A. anguilla*) with one with a short maturation trajectory (e.g. *A. australis*) could be implemented in eel aquaculture (This thesis).
7. The process of vitellogenesis in eels will occur during their oceanic spawning migration **not** afterwards (after Bast & Klinkhardt, 1988).
8. A decrease in melatonin levels may result in suppression of the dopaminergic system and thereby stimulate maturation in European eels (after Sébert et al., 2008).
9. It is important to obtain knowledge of the natural conditions encountered during the spawning migration to improve eel aquaculture. Therefore, the currently used pop-up satellite tags for tracking eels need to be improved (after Burgerhout et al., 2011; Methling et al., 2011).
10. Studying the natural (neuro)-endocrinological pathways of closely related eel species, which are sexually more advanced at the onset of migration, will contribute to understanding the maturation process of European eels.
11. Restocking of artificially reproduced eels will most likely not help the restoration of the wild population due to lack of imprinting of the spawning area.
12. When an experimental and a control group both change over time, their final differences tell nothing about the direction in which each group has changed - this requires comparison with a control group that shows the initial situation.
13. From a pure scientific point of view it is a waste not to publish so-called negative results, as it results in a high degree of 'reinventing the wheel'.
14. Anders denken is niet persé verkeerd denken.