

# Does parental size increase lobster fry survival in hatcheries?

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## Background

Marine reserve is one of the more promising tools for restoring and maintaining marine biodiversity. Several marine species have increased both in number and size within reserve boundaries and the good results have led to a number of public and private initiatives along the Norwegian coast.

One such initiative is the combined conservation and sea ranching area off Flekkerøy in Kristiansand (Oksøy lobster sea ranching area) which aims to increase the population size and individual size of lobsters. To achieve this, the Flekkerøy Lobster Cooperative (Flekkerøy Hummer SA) has partly initiated fry production in a local hatchery which to date has released more than 47,000 lobster fry, as well as completely protected part of the ranching area where lobster fishing is completely banned. The purpose of the protected area is both to release larger females that can later be used as breeding animals in the hatchery and large males that are probably favorable for the species' reproduction. Release of large animals in the protected area is also desirable to compensate for the fact that these in recent times and to a large extent, are perceived to have been fished up both around Flekkerøy and in Kristiansand municipality.

## Suggested project

One important first step in evaluating the effectiveness of the combined hatchery and sea ranching initiative is to test if size of parents increases survival of lobster larvae and juveniles in the hatchery. This project — which is a collaboration between UiA and the Flekkerøy Hummer SA — will combine a thorough literature review on which factors affect survival of lobster fry in hatcheries with an experimental evaluation of the effect of parental size (males and/or females). The experimental work will be performed at the lobster hatchery at Flekkerøy during spring / summer 2021.

## Contact

If this project sounds interesting to you, please don't hesitate to contact [ane.t.laugen@uia.no](mailto:ane.t.laugen@uia.no) for more information and discussions about developing a project in line with the description above.