## 1.1.1 Nofima CFU

#### Name of the infrastructure: Nofima Cleaner Fish Experimental Unit (CFU)

Location: Sunndalsøra, Norway

Web site address: http://nofima.no/en/research-facilities/sunndalsora-aquaculture-research-station/

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### 1.1.1.1 Facilities

Claner fish experimental unit (CFU) has licence for holding ballan wrasse and lumpsucker. The tanks (3 x 6000l; 3:3000l 4 x 1500l; 12 x 800l) can be used for brood stock nutrition, environment manipulation and experiments using dry feed for juvenile cleaner fish. The research aims at production of cleaner fish by aquaculture, as opposed to wild catch.

### 1.1.1.2 Services currently offered by the infrastructure

CFU offers experiments on brood stock treatment on available fish, mechanical handling of eggs, growth performance experiments under different environments, feeding routines and standard feed (dry feed).

This facility is integral to the Nofima Research Station for Sustainable Aquaculture, which has a large national and international user base, and is well known in the field worldwide. Significant break-troughs have been made in fish nutrition, fish welfare and quantitative genetics. In the last years, 9 national research institutes and 22 national aquaculture industry companies have been involved in projects. Internationally, 11 research institutions and 27 industry companies have been involved.

### 1.1.1.3 Modality of access

The CFU offers access to the available facilities including fish material at the station and technical support. It includes associated facilities, water and daily routine maintenance (inspection of fish, automatic feeding, removal of dead fish, and registration of environmental data).. CFU further offers equipment, technical assistance, and collaboration with researchers to do experiments in many fields on ballan wrasse and lumpsucker. The visitors will have to consider seasonal status of the fish and availability in cooperation with NOFIMA staff.

Visitor planning to perform experiments in the CFU facility will provide an experimental plan for their work, preferably in collaboration with Nofima researchers in the project. This will enable planning of activities in relation to other CFU activities. The visitors will, once they arrive, have the same access to the facility, equipment and technical support as any of the Nofima researchers already working in the facility.

Visitors and partners that come to CFU and want to perform trials in the facility will meet a scientific environment with highly qualified personnel. The visitors will collaborate with leading scientists within physiology, nutrition, water quality and welfare. The technical support at the research station

is of highest quality since they are trained and educated to perform trials in a scientific manner. Nofima Research Station for Sustainable Aquaculture at Sunndalsøra is frequently receiving national and international visiting scientists that perform trials and exchange scientific ideas. The visitors will be carefully followed up, and be included in the daily scientific work. The facility can also provide offices, meeting rooms, and access to housing.

# 1.1.1.4 Unit of Access

The unit of access at CFU is defined as one tank/week; equalling the occupation of one standard tank for seven days. Nofima uses actual cost method; it is an accurate and updated method to calculate the cost associated with the TNA.



Lumpsucker at the Nofima Cleaner Fish Experimental Unit (CFU). Photo: Terje Aamodt©Nofima.