

WP5

2016 PROGRESS & 2017 ACTIVITY PLANS

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9. Marts 2017, SDU

NOVAGRASS Workshop

Photo: Nibe Bredning, july 2017



2016 PROGRESS

WP 5. Development and application of large-scale restoration techniques

- Milestone 5.1 Commercial eelgrass harvesting
- Milestone 5.2 Eelgrass seed storage for commercial use
- Milestone 5.3 Seed and/or seedling broadcasting techniques for commercial use
- Milestone 5.4 Developed techniques are applied full-scale at field locations where stressors are prevented
- Milestone 5.5 Monitoring of eelgrass
- Milestone 5.6 Technical guidelines/user manuals

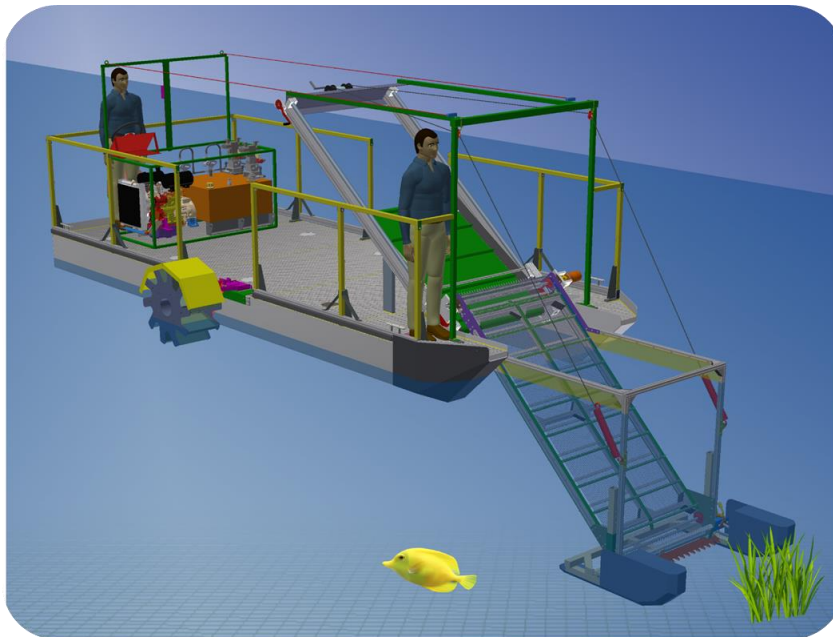
Planning & data analysis		
Development		
Field and lab activities		
Dissemination of results		

Year	2013				2014				2015				2016				2017			
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
WP5 – Large-scale																				
Milestone 5.1																				
Milestone 5.2																				
Milestone 5.3																				
Milestone 5.4																				
Milestone 5.5																				
Milestone 5.6																				

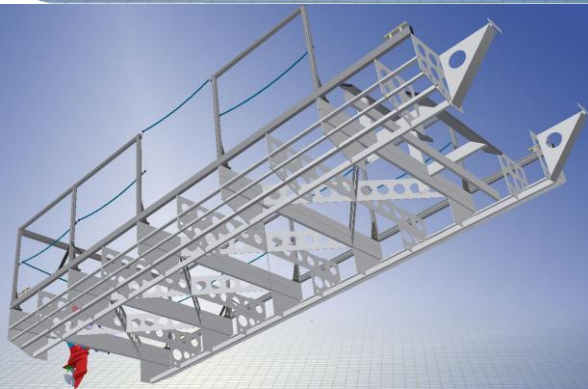
5.1 LARGE SCALE COMMERCIAL EELGRASS HARVESTER

- Collaboration with VIA University College and Mercantec (Technical and commercial educations / MetalCraft)
- VIA University College **DONE**
 - Design and drawings
- Mercantec **NOT DONE**
 - Building (together with professionals)

5.1 LARGE SCALE COMMERCIAL EELGRASS HARVESTER



	Situation 1: VIA students Mercantec trainees		Situation 2: Engineering & production company	
Estimated value of 1ha (10000m ²) of eelgrass in DKK*	kr.	126.915	kr.	126.915
Material cost for the harvester in DKK*	kr.	298.555	kr.	298.555
Engineering cost per hour	kr.	0	kr.	800
Engineering hours		1200		800
The total cost of engineering	kr.	0	kr.	640.000
Production cost per hour	kr.	0	kr.	600
Production hours		2000		1000
Total production cost	kr.	0	kr.	600.000
Total cost of the Eelgrass harvester	kr.	298.555	kr.	1.538.555



HARVEST 2016

Manuel with scythe

- 5,6 l seeds. 18 days man work
- In 2015:
- 15 l of seeds. (10 l good quality)
- 18 man days work (excl preparation)
- 2 days man work for cleaning seeds (small seperator)



STONE 5.2 STORAGE AND SEPARATION

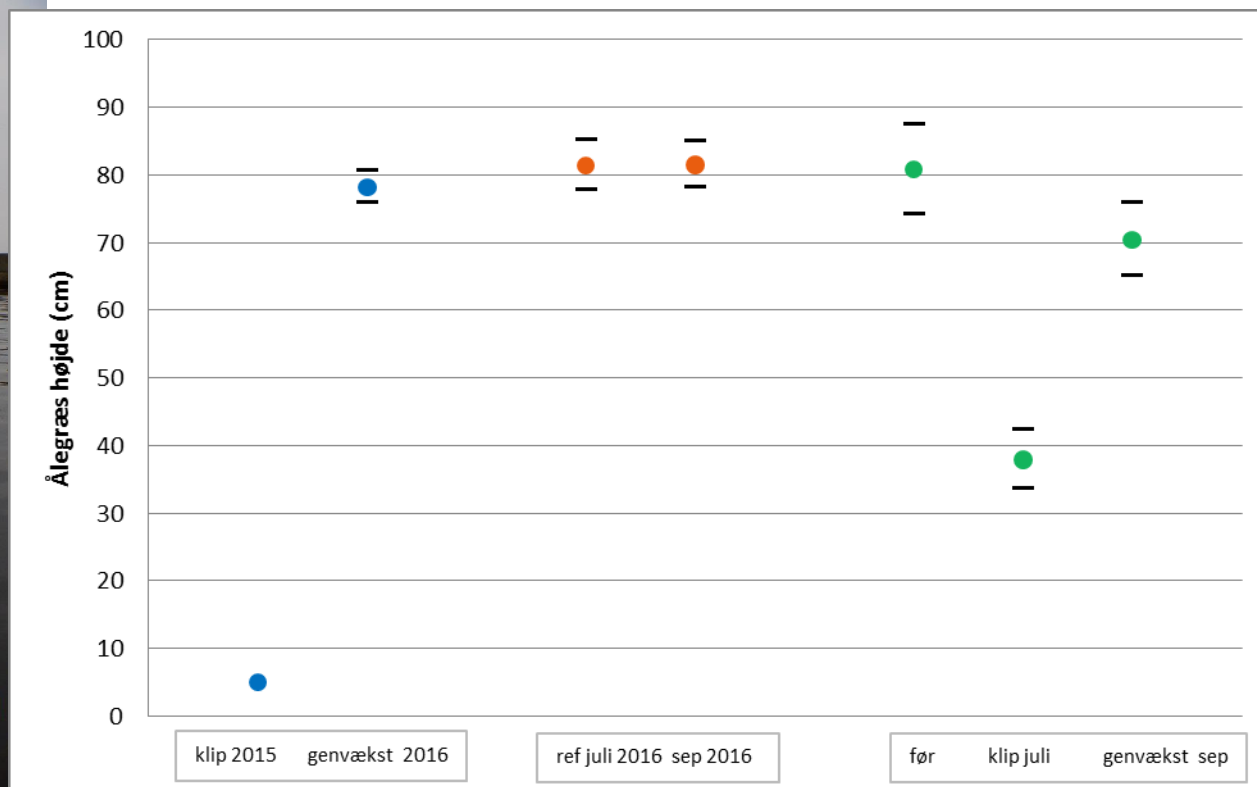


MILESTONE 5.3 SEED AND/OR SEEDLING BROADCASTING TECHNIQUES



New lighter version made in 2016

GROWTH OF EELGRASS



"GROWTH POWER" OF EELGRASS

LIMFJORDEN AT NIBE-GJØL



LIMFJORDEN AT NIBE-GJØL



LIMFJORDEN AT NIBE-GJØL



BREGNØR HAVN, ODENSE FJORD 2006



BREGNØR HAVN, ODENSE FJORD 2010



BREGNØR HAVN, ODENSE FJORD 2014



"GROWTH POWER" OF EELGRASS

Hypnosis's:

Eelgrass from different sites will have different growth capabilities

TESTING "GROWTH POWER" OF PLANTS



2017 ACTIVITY PLANS

- 5.1: large scale harvester: Done
- 5.2: storage. Done
- 5.3: Optimizing sowing machine. New pump.
- 5.4. Sowing 4 sites
- 5.5 Monitoring ongoing
- 5.6 Technical guidelines/user manuals

EUROPEAN GREEN CRAP



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