SALT Est: 2019

Selection of Aquaculture Lines with improved Traits

Gulf of Mexico Oyster Genetics and Breeding Research Consortium

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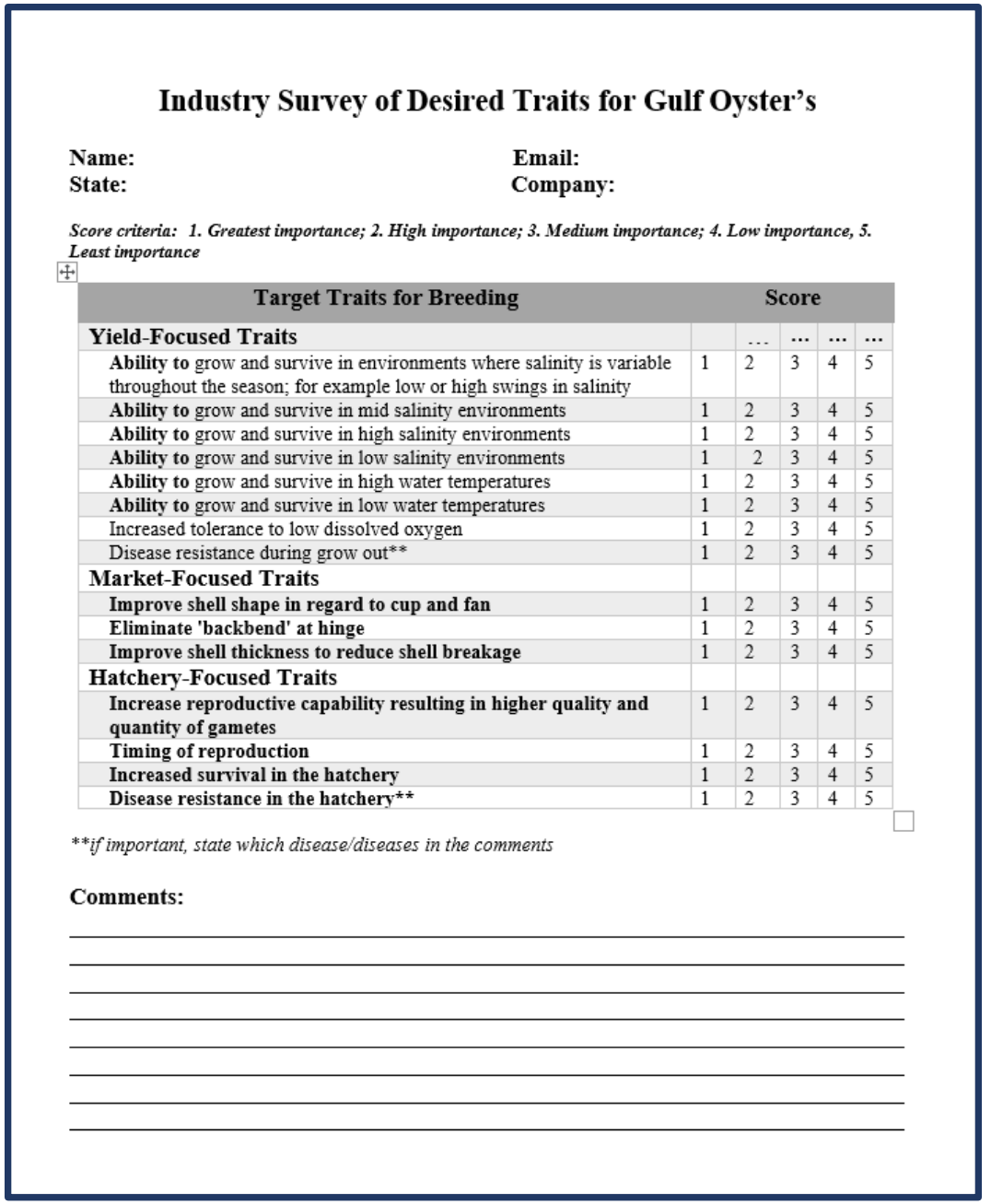
Purpose: To assist industry and state agencies by developing genetic resources for the eastern oysters of the Gulf of Mexico and creating a breeding program to improve production and market value traits as directed by industry needs.

Highlights

- Funding awarded 2019
  - 5 years contingent on federal appropriations to the program
- Year 1 Milestones
  - Breeding objectives: Survey of Industry needs
  - Collect Broodstock
  - Mature Broodstock
  - Genotypying
  - Cryopreservation
  - Spawning



Industry Survey of Desired Traits for Gulf Oyster's

Name: **Email:**
State: **Company:**

Score criteria: 1. Greatest importance; 2. High importance; 3. Medium importance; 4. Low importance, 5. Least importance

Target Traits for Breeding	Score				
Yield-Focused Traits		…	…	…	…
Ability to grow and survive in environments where salinity is variable throughout the season; for example low or high swings in salinity	1	2	3	4	5
Ability to grow and survive in mid salinity environments	1	2	3	4	5
Ability to grow and survive in high salinity environments	1	2	3	4	5
Ability to grow and survive in low salinity environments	1	2	3	4	5
Ability to grow and survive in high water temperatures	1	2	3	4	5
Ability to grow and survive in low water temperatures	1	2	3	4	5
Increased tolerance to low dissolved oxygen	1	2	3	4	5
Disease resistance during grow out**	1	2	3	4	5
Market-Focused Traits					
Improve shell shape in regard to cup and fan	1	2	3	4	5
Eliminate 'backbend' at hinge	1	2	3	4	5
Improve shell thickness to reduce shell breakage	1	2	3	4	5
Hatchery-Focused Traits					
Increase reproductive capability resulting in higher quality and quantity of gametes	1	2	3	4	5
Timing of reproduction	1	2	3	4	5
Increased survival in the hatchery	1	2	3	4	5
Disease resistance in the hatchery**	1	2	3	4	5

***if important, state which disease/diseases in the comments*

Comments: