Summary of the



May 11, 2017

Invasive Species



Lone Star Lionfish Symposium Mission:

Created a pro-active, unified Texas approach to managing the lionfish invasion through outreach and the creation of a multi-disciplinary State Management Plan



Multi-disciplinary Input

• Biologists

• Engineers

 Outreach & Marketing specialists

Policy

• Lawyer

Industry Experts

Educators

Economist

Recreational Interests





1st LSLS Topic Areas

- Priority Areas
- Outreach
- Research
- Policy
- Control / Management
- Funding
- Uses / Markets







1st LSLS = Brain Dump





Example: 1st LSLS Priority Protection Areas Brain Dump

- Rank areas by access, impacts and economic importance (70.21%)
- Passes, inlets or anything that leads into estuaries (54.25%)
- Identify source population locations → focused control / management (39.36%)
- Cost benefit analysis of priority target areas (36.17%)
- Marine Protected Areas (27.66%)
- Nurseries and important life stage habitats (24.47%)
- Density distribution maps (25.53%)
- Recolonization rates (17.02%)
- Target removal on oil rigs and other artificial reefs (15.96%)



2nd LSLS





2nd LSLS Participants



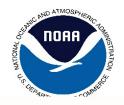




















Protecting nature. Preserving life."



PORTCORPUS CHRISTI



TEXAS



LAMAR UNIVERSITY









UNIVERSITY of **HOUSTON**

















2nd LSLS Group Discussions





State Topic Area Task Prioritization

2nd Annual LoneStar Lionfish Symposium Matrix Overlay with assigned values

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Z ^{na} Annt	2 nd Annual LoneStar Lionfish Symposium Matrix Overlay with assigned values						
8	9	10	11	12	13	14	15
7	8	9	10	11	12	13	14
6	7	8	9	10	11	12	13
5	6	7	8	9	10	11	12
4	5	6	7	8	9	10	11
3	4	5	6	7	8	9	10
2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8

Low

High

TEXAS

PARKS & WILDLIFE

2nd LSLS Prioritizations...





2nd Annual Lone Star Lionfish Symposium Matrix Results – Control and Management

1, 1, 5, 5	2	1, 1		1, 1, 1, 1, 5, 7	1,8	2, 3, 4, 6, 8,	4, 4
5, 5, 5, 5, 5, 10, 10	1, 5, 5, 5, 5, 5, 5, 6, 10, 10	1, 9	1, 3, 5, 6, 9, 10	1, 1, 3, 3, 3, 4, 5, 9	1, 3, 3, 3, 3, 3, 4	2, 2, 3	9, 2
5	1, 6, 8, 10	1, 3, 6, 9, 9	1, 1, 6, 7, 7, 10	2, 2, 3, 5, 6, 6, 7, 7	3, 7, 7, 8, 9, 9, 11	2, 4, 4, 4, 9, 9, 11, 11, 11, 11, 11	4, 4, 11
6	2, 6	1, 4, 5, 5, 6, 7, 7, 10	1, 1, 2, 2, 6, 7, 7, 7, 10	2, 2, 3, 4, 4, 6, 6, 6, 6, 7, 7, 7, 7, 7, 8, 9, 9, 9	3, 3, 3, 4, 4, 4, 6, 7, 7, 7, 8	3, 4, 6, 9, 9,	2, 2, 2, 3, 3, 4
1, 6	6, 10	5, 6, 7, 8, 10, 10	2, 2, 2, 4, 8, 8, 11	3, 4, 4, 6	6, 7, 8, 9, 9	11	11, 11
	8, 10, 6	2, 3, 4, 5, 6, 8, 8, 9, 10, 10	1, 7, 8, 11	3, 8, 9, 9, 10	4, 7, 8, 9, 9, 9	2, 8, 8, 9, 11	11, 11
10, 10	5, 10			9	8, 8, 8	2, 11, 11, 11, 11	2, 11, 11
10	8, 10	8			11, 11	2, 4, 11	5, 8, 10, 10

2nd Annual Lone Star Lionfish Symposium Matrix Results – Control and Management

Action Items – Votes (with average)

- 1. 24 votes/224 cumulative score 9.33
- 2. 24 votes/225 cumulative score 9.37
- 3. 24 votes/253 cumulative score 10.54
- 4. 24 votes/250 cumulative score 10.42
- 5. 24 votes/184 cumulative score 7.67
- 6. 25 votes/200 cumulative score 8.00
- 7. 24 votes/214 cumulative score 8.92
- 8. 24 votes/180 cumulative score 7.50
- 9. 24 votes/226 cumulative score 9.42
- 10. 23 votes/135 cumulative score 5.87
- 11. 25 votes/243 cumulative score 9.72



2nd Annual Lone Star Lionfish Symposium Matrix Results – Control and Management

Bulleted Priority List (Lowest Hanging Fruit First)

Action 3: Encourage LOCAL control – specific sites.

Action 4: Handling classes hosted throughout the Texas coast by various agencies and organizations.

Action 11: Recognition/certification card for attendance to a lionfish removal/handling workshop.

Action 9: Host organized removal event

Action 2: Encourage industry to report sightings and if possible even remove

Action 1: Determine threshold population size for management requirements and different habitat types.

Action 7: Derbies are effective at reducing populations.

Action 6: Hire divers to target areas (e.g. artificial reefs) to clean out through spearfishing

Action 5: Lionfish specific trap (reduce/eliminate bycatch) that can catch more than one.

Action 8: Commercial fishers should be able to keep/kill (but also keep records)

Action 10: Create a vacuum collection device



Outreach Event









Questions?



