

Dense-flowered Cordgrass *Spartina densiflora* Removal Program

Denman Island 7th Season Fall 2019 Interim Report

The primary areas known for the presence of the invasive marine grass *Spartina densiflora* along Denman Island foreshores were walked in October 2019. The total number of plant bunches¹ removed was 69. Fall removals reflect the majority of *Spartina densiflora* growth for the current growing season. Often, seeing and then removing the plants is hampered by large amounts of seaweed or log debris covering the plants on the foreshore. This fall, only a few sites had moderate seaweed concentrations, most sites had only small amounts, thus fall counts are expected to be close to the total season removals. A second monitoring of all suitable habitats along the entire shoreline will be conducted in the spring and then the total removals for the season will be finalized. Most of the plants removed were medium (22) and small (33) with only 14 tiny-sized² plants. Very few plants had any seed-heads, some seed-heads had been removed by the Hornby monitor, and of those few that remained (<5) most were not mature and thus seeds had not been shed.

Removal success achieved another goal this season in that total number of re-seeding *Spartina densiflora* was reduced by another order of magnitude. In the third season, after the mature plants were removed, young seedlings totaled more than 10,000, and since then the number of young plants re-seeding has been steadily declining, as shown in Figure 1.

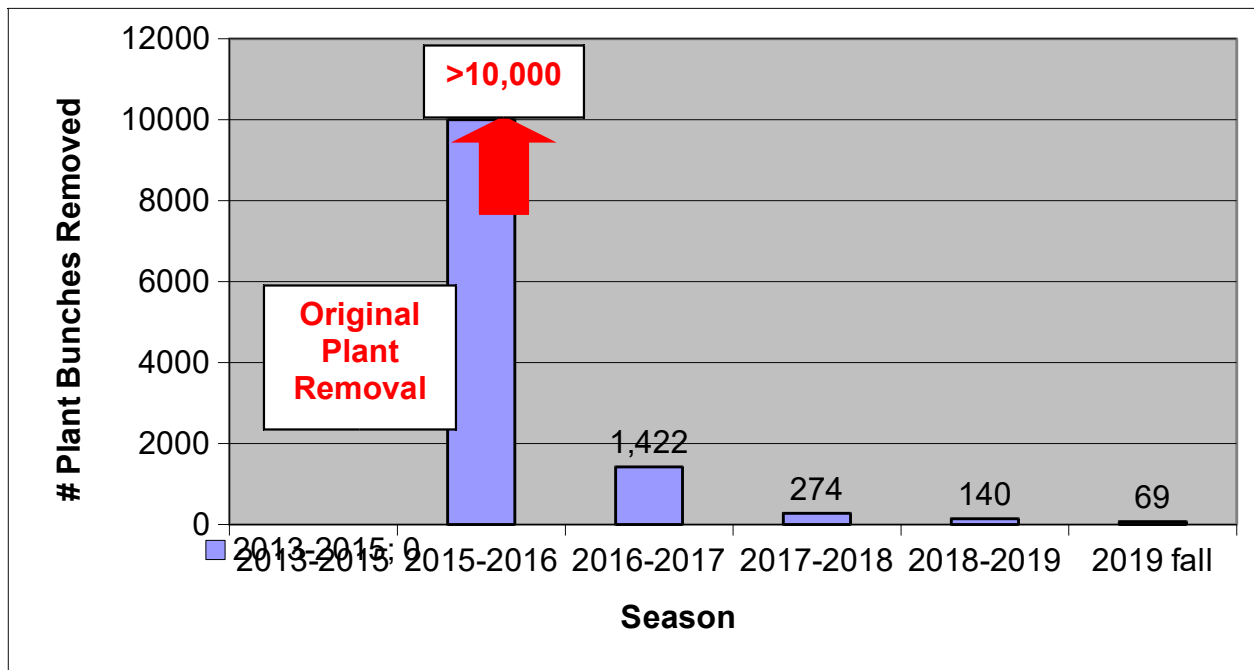


Figure 1. Summary of *Spartina densiflora* removals Fall 2013 to Fall 2019 on Denman Island.

¹ *Spartina densiflora* is a 'bunch' grass and seeds tend to root together creating clumps or bunches of shoots that appear to be one plant but can often be separated into several individual plants. Thus, the general term 'bunch' is used to refer to removals, which are then classed by size based on the number of major stems.

² Plant bunch sizes are tiny <5 stems, small 5-10 stems, medium > 10 stems.

Removal numbers and sites around Denman Island, based on the Spartina Working Group locations designations, are shown in Figure 2. Plant sizes, locations and numbers are shown in Table 2.

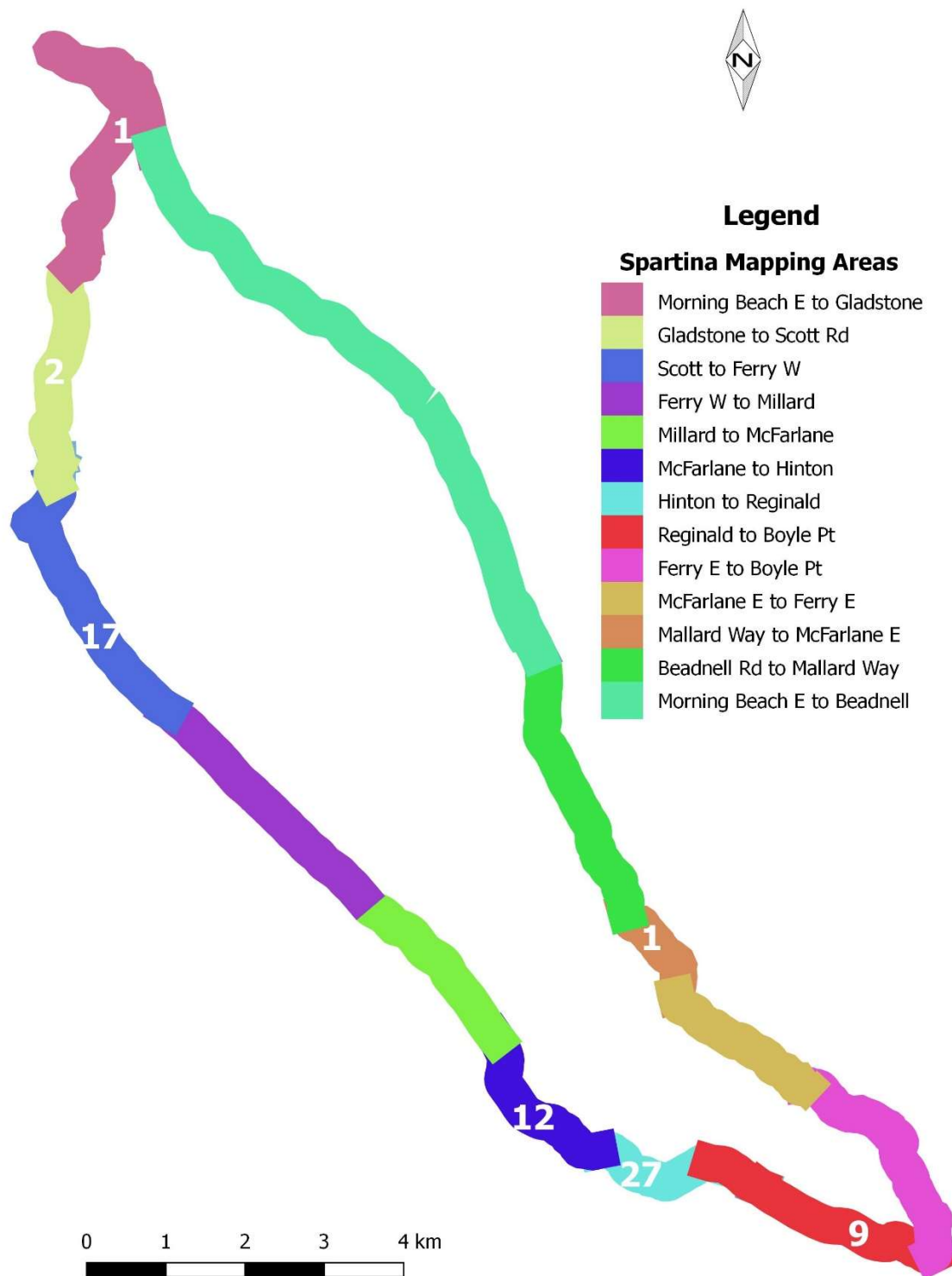


Figure 2. *Spartina densiflora* removal numbers from areas along the Denman Island foreshore in October 2019.

Table 1. Fall (October 2019) *Spartina densiflora* removal data for Denman Island.

PLANT SIZE:	M > 10 stems,	S 5-10 stems,	T <5 stems
AREA IMPORTANCE:	20-49 Important	50-99 Concern	>100 Critical

***Spartina densiflora* plant bunches removed October 2019**

AREA	Area Location (from N → S)	Site	Site #	Fall Size & Count	Fall Total	Spring Size & Count	TotalSpring	Area Total
3	(N Tip) → Gladstone	Komas N of PM's	5	S1	1			
8	Gladstone → Scott Rd	1st bay N	9	M1 T1	2			
1	Scott Rd → Ferry	Denman Pt S Ck	16	S1 T1	17			
		LP	18	M1				
		N Beacon	~27	S5				
		Beacon	28	M1 S3 T4				
		N ferry	35-36	S1				
5	McFarlane W → Hinton	2nd Pt N	49 & 50	M3 S5 T2	12			
		1st Pt N	51	M1 S1				
19	Hinton → Reginald	old Valens N	54	M6 S5 T5	27			
		new Valens N (inter)	55	M3 S2				
		new Valens S	56	S1				
		SB 3 marshes	57 58 59	S1				
		SC's	60	T1				
		Reginald N JN's	67	M3				
18	Reginald → Boyle Pt	Boyle Bay	74	M3 S6	9			
15	(Beach access E) → McFarlane E	S	79	S1	1			
Denman Island Fall Total =					69			

* Site # refers to original Denman site database.