

Controlling Invasive Plants on Portuguese Islands Ana Isabel Fagundes

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Berlenga *Carpobrotus edulis*





• Rocky Island with 78 ha



- Steep cliffs 80 meters high
- Carpobrotus introduced in the fishermen's

village in the 1950s

In 2014 the area occupied was almost 4 ha







Methodology

- Manual removal along the contour lines delimiting strips.
- In the beginning strips with 2-4 meters wide.
- The material removed was rolled and left to dry on top of the

Carpobrotus mat immediately below.

• Necessary to abseil to reach the most inaccessible patches.











Results

- From October 2014 to December
- 2018 we removed ~90% of the
- Carpobrotus area



Problems found

































Deserta Island *C. edulis; Acacia saligna; Agave americana*



Invasive Plants Barreta Island

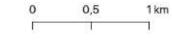
Species

- Acacia sp.
- Agave americana
- Carpobrotus edulis



- Sandy Island with 7 Km-long
- 1 restaurant and 1 fishermen house
- In 2020 the invasive plants
 - occupied an area of 1.6 ha









Control of C. edulis

13,000 m² removed manually



1,480 m² mulching sheets

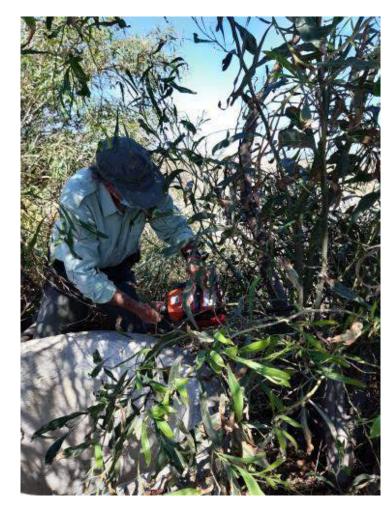






Control of A. saligna

618 m² from a combination of cutting and herbicide application











Control of A. americana

- 1,000 m² controlled
- Smaller plants manually uprooted
- Larger plants a combination of cutting and herbicide application













Results

- From January 2020 to April 2023 we removed all invasive alien plants
- All methods had regrowth of the target invasive species, except for the mulching sheet areas
- Areas of *A. americana* had the highest percentage of regrowth
- Native vegetation recovery was significant in the mulching sheets areas





















Porto Santo Island Arundo donax



- Island with 42 Km²
- Resident population of 5,562 people
- 119,000 tourists per year
- Intervention area of 64,653 m²









Methodology

Combination of mechanical removal and herbicide application







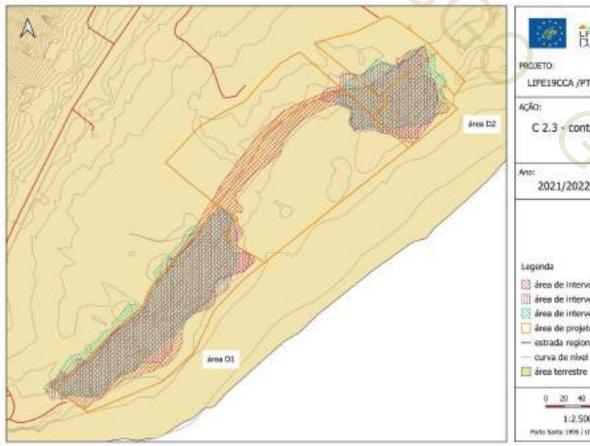




Results

A. donax controlled in 30,699 m²

Presence of native flora increased 25%































Considerations

- The persistent regrowth, highlights the importance of long-term commitment.
- Continued monitoring and management, to prevent reinvasion.
- Detailed assessment of local conditions and characteristics of the invasive species before selecting a control method.











THANK YOU!

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