NUMERICAL DATA

Plant species diversity for vegetation restoration in manganese tailing wasteland (2018)

Changes of plant species diversity in three sites of manganese tailing wasteland

| Changes of plant species diversity in three sites of manganese tailing wasteland | | | | | | | |
|--|------|-------------------|---------------------|--------------------|----------------------------|---------------------|------------------------|
| Area | Time | Species number | Average height (cm) | | Average total coverage (%) | | Plant growth situation |
| Tailing site | 2012 | 10 | 10 | ± 1.2 ^f | < 5 | ± 0.7 ^e | Poor |
| | 2014 | 11 | 15 | ± 2.3 ^e | < 5 | ± 1.1 ^d | Poor |
| External-soil | 2012 | 14 | 20 | ± 3.4 ^d | 35 | ± 3.8 ^c | Better |
| site | | | | | | | |
| | 2014 | 16 | 40 | ± 5.7 ^c | 45 | ± 5.3 ^b | Better |
| Rehabilitatio | 2012 | 21 | 35 | ± 4.6 ^b | 95 | ± 11.6 ^a | Fine |
| n site | | | | | | | |
| | 2014 | 21 | 65 | ± 8.1 ^a | 98 | ± 13.8 ^a | Fine |

Tailing site: exposed tailings, the control treatment; external-soil site: soil covering of 10-cm thickness; rehabilitation site: soil covering of 10-cm thickness, soil improving (adding fowl dung) and seeding propagation of Cynodon dactylon (Linn.) Pers.

Source: https://www.ncbi.nlm.nih.gov/pubmed/29948686

Integrating the Passenger-Driver hypothesis and plant community functional MARK traits to the restoration of lands degraded by invasive trees (2018)

Site details including location, vegetation type, Pittosporum undulatum density prior to removal, year of removal and climate.

| Site name | Ref | Latitud | Longit | Ecological | Initial P. | Year of P. | Mean | Elevation (m) |
|---------------------------|-----|---------------------|----------------|------------------------------|-------------|------------|----------|---------------|
| | no. | e | ude | vegetation | undulatum | undulaum | annual | |
| | | | | complex (EVC) | density (%) | removal | rainfall | |
| | | | | | | | (mm) | |
| Wonga Park (WP) | 1 | -37.755 709 | 145.28 3738 | Grassy dry forest | 50 | 2016 | 807.5 | 141 |
| Greens Bush (GB) | 2 | -38.418 634 | 144.95 8019 | Damp sands herb rich | 50 | 2015 | 779.4 | 176 |
| | | | | woodlands | | | | |
| Panton Hill (PH) | 3 | -37.642 608 | 145.24 2843 | Grassy dry forest | 70 | 2014 | 688.5 | 181 |
| Woods Reserve (WR) | 4 | -38.288 326 | 145.09 1165 | Lowland forest | 50 | 2012 | 904.3 | 91 |
| Birdsland Reserve (BR) | 5 | 37.9244 44 | 145.34 0278 | Grassy dry forest | 30 | 2011 | 1113.6 | 170 |
| Glenfern Valley | 6 | - 47.909 783 | 145.31 4540 | Valley Grassy Forest | 60 | 2010 | 1056.8 | 187 |
| Bushlands (GFVB) | | | | | | | | |
| Ferntree Gully (FTG) | 7 | -37.879 164 | 145.30 6283 | Grassy Dry Forest | 50 | 2006 | 928.4 | 276 |
| Red Hill (RH) | 8 | -38.401 103 | 145.04 0113 | Herb Rich Foothill Forest | 60 | 2006 | 1008.9 | 114 |
| Montrose (M) | 9 | -37.820 394 | 145.34 6866 | Grassy dry forest | 60 | 2005 | 1031.9 | 409 |
| Sherbrooke Forest (S) | 10 | -37.905 239 | 145.36 9618 | Wet Forest | 50 | 2002 | 1261.5 | 495 |

Source: https://www.sciencedirect.com/science/article/pii/S0378112717313956

Toward Cost-Effective Restoration: Scaling up Restoration in Ecosystems Degraded by Nonnative Invasive Grass and Ungulates (2017)

Summary of Present Value of Restoration Costs for 30 yr Period for Three Classes of 1 ha Sites (Easy, Moderate, Difficult) in an Invasive Grass–Dominated Lowland Ecosystem on Oʻahu, Hawaiʻi.

| Restoration Costs US\$ 2015 (% Total) | | | | | | |
|---------------------------------------|----------------------------|---------------------------------|---------------------------------|--|--|--|
| Parameter | 1 ha Easy ^a | 1 ha Moderate ^b | 1 ha Difficult ^c | | | |
| Establishment | 79.3% | 79.3% | 81.5% | | | |
| Clearing | \$2,840 (1.5%) | \$5,240 (2.4%) ^{M1} | \$5,240 (1.7%) ^{D1} | | | |
| Fence | \$26,803 (14.4%) | \$30,400 (13.8%) ^{M2} | \$35,110 (11.6%) ^{D2} | | | |
| Herbicide | \$3,346 (1.8%) | \$3,783 (1.7%) ^{M3} | \$5,078 (1.7%) ^{D3} | | | |
| Outplanting | \$93,141 (49.9%) | \$110,084 (49.9%) ^{M4} | \$164,718 (54.4%) ^{D4} | | | |
| Replanting | \$21,950 (11.8%) | \$25,444 (11.5%) ^{M4} | \$36,742 (12.1%) ^{D4} | | | |
| Maintenance | \$38,636 (20.7%) | \$45,546 (20.7%) ^{M5} | \$56,028 (18.5%) ^{D5} | | | |
| Present Value | \$186,716 | \$220,497 | \$302,917 | | | |
| Cost per hectare | \$166,716 ha ⁻¹ | \$220,497 ha ⁻¹ | \$302,917 ha-1 | | | |

Source: https://muse.jhu.edu/article/671677/summary