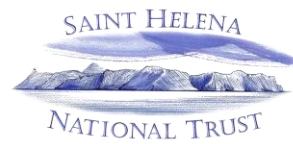




**St Helena
Government**



Landscape & Ecological Mitigation Programme (LEMP)

Annual Report

April 2019 – March 2020

1. Executive Summary

- 1.1. 2019/20 focused on completing outstanding large-scale rehabilitation and compensatory works including at Bottom Woods and Rupert's Valley. This involved works on over 4 hectares of land, with over 14,000 plants planted out. The results from biological surveys indicate an approximate survival rate of 55% within LEMP plantings since monitoring began.
- 1.2. Island-wide drought conditions impacted established LEMP plantings throughout the year; sustained rainfall is desperately needed to reverse the impacts of drought-stress within the plants. Positively though for long-term sustainability of the planted zones, self-seeded endemic seedlings were still observed throughout LEMP zones after isolated rainy periods
- 1.3. Work continues between LEMP stakeholders on planning for and agreeing long-term maintenance responsibilities for LEMP zones following completion of current funding; ultimately SHG retains overall responsibility for ensuring long-term maintenance requirements are met, but current resources are already under pressure.

2. Partnerships

2.1. Environmental Management Division (EMD)

LEMP funded one full time member of staff at the EMD endemic nursery to work on LEMP related activities such as seed collection, sorting and storage, plant propagation as well as nursery and living gene bank maintenance, to support EMD in achieving deliverables agreed in a Service Level Agreement. As the project continues to downscale while drawing nearer to the conclusion of the funded programme; this will be the final year of funding for these activities at EMD.

During the year EMD propagated and supplied 4,400 plants as part of the Service Level Agreement with LEMP; the majority of which were provided to the LEMP team for planting. Issues with propagation over the course of the year meant that 500 plants were unable to be provided within this year, provision has been made for this in the next financial year.

LEMP collaborated with EMD's Waste Management Services to utilise a grant secured from the Governor's Enabling Fund to provide concrete picnic bench sets and a bin for the LEMP zone 20 (Deadwood amenity area). LEMP will plant, and maintain, the area over the final year of the project.

2.2. St Helena National Trust (The Trust)

In August 2018 practical delivery of the LEMP was divested to the Trust, while SHG retained overall responsibility for the project. Quarterly meetings of the LEMP Governance Group (consisting of the Director of the Trust, the Director of the Environment & Natural Resources Directorate (ENRD), the DfID SHAP Programme Manager, and the LEMP Team Leader) were held to review progress against planned work and the forecasted budget. There was some turnover in the role of National Trust Director within 2019/20; however, there was minimal impact on operation and progress of the LEMP.

Several short-term contracts were successfully completed by the Trust including pest and predator control within LEMP sites and the Central Basin – the latter following recommendations from the LEMP-funded invertebrate survey of the area (see section 2.5); continued provision of wood chip mulch; vegetation surveys of LEMP plots; compensatory mitigation works at the Liberated African Burial Grounds at Rupert's Valley; a survey of known Mole spider sites; compensatory works at Cook's Bridge; propagation of endemics and

ornamentals for LEMP. Issues with propagation over the course of the year meant that 500 plants were unable to be provided within this year, provision has been made for this in the next financial year.

Quarterly monitoring was also completed of the drop-traps at Blue Point. Unfortunately, despite considerable evidence of rabbit activity around the traps, few were trapped using this method in this area. The method is also being trialled at the Millennium Forest.

2.3. St Helena Airport Limited (SHAL)

Island-wide water restrictions were in place through the majority of the year following prolonged drought conditions. LEMP received limited exemptions to support irrigation of priority LEMP areas and worked with SHAL and utilities provider Connect St Helena to access water from Borehole 5 throughout the year without hindering essential airport operations.

An SLA was produced to update an existing agreement on maintenance responsibilities within the airport landscaped beds, and LEMP sites in the area. This will be valid through to the end of the LEMP funded programme.

Two potential specifications remain to be drafted; however, any work at the sites in question is dependent on completion of other airport-related works, and alternative plans for the sites by SHG.

2.4. Department for International Development (DfID)

The DfID Deputy Programme Manager for St Helena Airport visited St Helena in November 2019. A familiarisation site visit was completed to review LEMP bases and rehabilitation sites.

The LEMP Logical Framework and Project Plan was updated to outline achievements and work completed to date along with targets and priorities for the remaining year of the funded LEMP programme.

2.5. Other

The final report outlining findings from the LEMP-funded invertebrate survey of the Central Basin was published (<https://www.sainthelena.gov.sh/directorates/airport/airport-publications/>). The Central Basin was identified as key compensatory habitat for the LEMP and the survey enabled an assessment of the present abundance of invertebrate species and a comparison of invertebrate presence in the Central Basin, against the survey completed pre-construction activities for the airport, in 2003.

3. Delivery

3.1. Staff

Throughout this period the LEMP consisted of two field teams, a team leader and project support. Due to the planned reduction of the LEMP budget in the upcoming final year of the programme, preparation was completed for the final planned team restructure of the LEMP. A selection process was finalised in November 2019 and the LEMP team will reduce to one field team led by a team leader in the new financial year. Despite the instability around planning for the final restructure, the team was relatively stable throughout the year with minor staff movements and successful and speedy recruitment to fill vacant positions.

The global threat of the COVID-19 pandemic resulted in local precautionary measures put in place on-island during March 2020, with enhanced measures from 31 March into April. For the Trust this included social and physical distancing, voluntary home-isolation of vulnerable staff, working from home or staggered hours where possible, and intensive vehicle and equipment sanitizing.

Capacity building in staff remains a key legacy of the LEMP project. During this year staff members engaged in six training events, including PRINCE2 Practitioner training, EDCL training, a 'Safe use of pesticides' course; nursery training under an Environmental Protection Ordinance policy; first aider renewals; and GIS Analysis training. In addition, LEMP staff engaged in an away day to facilitate team building; and a work exchange day with the Trust and EMD.

3.2. Surveys

125 follow-up vegetation surveys for the LEMP biological monitoring were completed in 2019/20 by the Trust. For the LEMP biological monitoring a baseline survey of marked plots was conducted, and numbers of endemic and native plants and percentage cover of all species present were recorded. Survival rate and changes in abundance of species can then be monitored as further follow-up surveys are completed for each plot.

The LEMP teams also completed two rounds of biannual zone monitoring checks; involving a thorough check of all completed rehabilitation sites to monitor fence condition, irrigation functionality, the condition of plants and to identify any other maintenance issues.

The fifth fixed-point annual photographic survey for the project was also completed. This involved photographs of key LEMP sites taken from a fixed point annually to enable a review of progress year on year. This record shows real change and improvements across a range of areas impacted by construction activities; however, in this year the impact of the drought on LEMP plantings is apparent.

3.3. Practical Works

The LEMP endemic propagation requirements have been outsourced to EMD and the Trust since June 2018. Over 4,400 plants were propagated by the EMD nursery at Scotland, and over 4,300 by the Trust. The LEMP team completed some minor propagation of just under 600 ornamental plants at the Piccolo standing out area.

In 2019/20 the LEMP focused on completion of practical works (clearance, irrigation and planting) at 6 sub-plots across three zones at Zone 1 – Rupert's Valley; Zone 5 – Deadwood berms, and Zone 9 – Bottom Woods. Clearance works were completed in other areas and will be reported on in the next annual reporting period. At this stage of the LEMP there is no requirement for further large-scale fencing works; however, works were completed on over 4 hectares of land, and over 14,000 plants were planted out. Survival rate of plants planted under the LEMP was estimated to be around 55% (allowing a margin of error for replacement planting) and percentage ground cover increased by approximately 7% in the native categories. These figures are promising particularly in light of the drought conditions on-going throughout the year, and the impact this has had on LEMP endemic plantings.

Despite the impact of the drought, there continue to be positive implications for the long-term sustainability of more established LEMP fenced plantings. A number of endemic seedlings were observed germinating from LEMP plantings, and endemic wirebirds (*Charadrius sanctaehelenae*) were observed nesting throughout LEMP zones. The periodic invasive plant clearance works at Flagstaff also continues to benefit the wild population of scrubwoods there.

3.4. Challenges

Island-wide drought

The drought conditions throughout the year and lack of sustained rainfall to replenish island reserves is a pressing issue for the drought-stressed LEMP plantings. Manual irrigation had previously been ceased at established LEMP sites, and irrigation throughout this time was prioritised to newer planted areas.

Long-term maintenance agreements

The challenge of securing commitment to long-term maintenance of LEMP sites, and long-term funding to support the LEMP legacy remains and it will be a priority to work with project partners to resolve this throughout the final year of the LEMP.

3.5. Public Relations/Communications

Monthly highlight and progress reports were produced for partner stakeholders; and project progress was promoted at the Trust's Broadway House, via social media accounts, and at the Trust's stall at the biennial Career's Fair in October 2019.

Meetings and site visits were held with various stakeholders throughout the year to review LEMP progress and agree future plans.

Updates on LEMP progress were also provided through local media and various reports uploaded to the SHG website. Further information can be found through the following link:

- SHG website <https://www.sainthelena.gov.sh/directorates/airport/airport-publications/>

4. Future Works

- 4.1. The overall project plan clearly lays out the remaining works to be completed as part of the LEMP project. In the final year of the project the remaining smaller zones such as the amenity area will be completed, in addition to compensatory works at Flagstaff and the Central Basin. On-going maintenance of existing LEMP zones will be also be the focus over the final year.
- 4.2. The LEMP will work with project partners and potential funders to agree long term maintenance requirements and responsibilities of LEMP sites after the funded programme concludes on 31 March 2021.
- 4.3. The team will be restructured to one field team for the final year of the LEMP.

5. Conclusion

- 5.1. As the project continues to downscale and meet key targets, the bulk of planned practical works is largely complete with over 8,000 plants produced for LEMP in 2019/20 and over 12,000 planted out by LEMP and partners.
- 5.2. Through the on-going creation, enhancement and maintenance of self-sustaining endemic restoration areas; improvement of natural dryland endemic populations; and continuous staff and resource capacity-building, the LEMP continues to contribute an incredible legacy for endemic conservation on St Helena.

Acronyms and abbreviations

DfID	Department for International Development (UK) (project funder)
EMD	Environmental Management Division (SHG)
ENRPD	Environmental, Natural Resources & Planning Directorate (SHG)
HTH	Half Tree Hollow (Island District)
LEMP	Landscape & Ecology Mitigation Programme
SHG	St Helena Government
SHAL	St Helena Airport Limited (airport operator)
The Trust	St Helena National Trust (Island Non-Governmental Organisation)

Appendix 1 – Key LEMP achievements: Apr 2019 - Mar 2020

Achievement	Details	Date	Delivered by
Plants grown and seed collected	594 ornamental plants were potted on by the LEMP team at the Piccolo nursery site. 4,400 plants were grown for LEMP at the EMD nursery at Scotland and 1,499 of these planted into LEMP rehabilitation sites and seed orchards. 4,386 plants were supplied to LEMP from the Trust endemic nursery. Minor seed collections (scrubwood and boxwood) from LEMP zones taken to EMD or direct sown on site.	April 2019 to March 2020	EMD / LEMP/ Trust
LEMP compensatory works	Compensatory works were completed at Flagstaff, the Central Basin, Cook's Bridge and Ruperts.	April 2019 and March 2020	LEMP / EMD / SHNT
LEMP rehabilitation plots	LEMP rehabilitation works were completed in 5 subplots across three zones.	April 2019 to March 2020	LEMP

Zone	Subplot	Name of area	Works	Fence length (m)	Area (m²)	Irrigated area (m³)	No. plants
1	Ruperts	Roadside of run	Clearance and treatment of acacia; planted ornamentals	N/A	150	N/A	188 from 3 species
1	Ruperts	Upper Burial Ground*	Clearance of tungi, delineation of boundary using drought tolerant ornamentals, introduction of ground cover	N/A	16,193	260	780 approx. from 2 species
5	Deadwood	Deadwood berms	Clearance of invasive species; planted ornamentals	N/A	3,007	N/A	1,560 from 2 species
9	9.1D compensatory	Bottom Woods*	Cleared, irrigated and planted	N/A	8,020	3,546	5,776 from 5 species
9	9.1E compensatory	Bottom Woods*	Cleared, irrigated and planted	N/A	5,780	1,535	1,513 from 5 species
9	9.1F compensatory	Bottom Woods*	Cleared, irrigated and planted	N/A	8,915	1,669	2,573 from 5 species
Totals				0	42,065	7,010	12,390
Additional plants in other LEMP sites (seed orchards/replacements/additional planting etc.)							2,281
Total planted 2019/20							14,671

* Part or all compensatory works

Appendix 2 – Photographic Review: April 2019 - March 2020



2.1 LEMP team Apr – Jun 19



2.2 LEMP team Jun19 – Mar 20



2.3 Propagation of ornamentals, Jun 2019



2.4 Clearance works at the Lower African Burial Ground Aug, 19



2.5 Mitigation planting at Ruperts's (Zone 1), Sep 19



2.6 Clearance at zone 20 – Deadwood amenity area, Oct 19



2.7 Fencing repairs, Zone 9- Bottom Woods, Nov 19



2.8 Invasive vegetation management, Mar 20



2.9 Deadwood amenity area – Zone 20, before (2016)



2.10 Deadwood amenity area – Zone 20, after (2020)



2.11 Fixed point survey, zone 9.3, before (2016)



2.12 Fixed point survey, zone 9.3, after (2020) – notice the impact of the drought on established plantings

Appendix 3 – LEMP Organogram: April 2019 (in-house)

LEMP Organogram
April 2019