

Vreugde Guest Farm

Environmental Management Plan 2024

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Description and extent of the existing activity

Vreugde Guest Farm, a small family-run tourist accommodation establishment, is located on a working cattle- and sheep-farm, in a flat limestone valley, 40km south of the Etosha National Park's Anderson Gate. The Guest Farm has been running continuously as a tourist establishment since 2001. It began with 5 guest-rooms (3 rooms inside the existing farm-house and 2 rooms inside a stand-alone purpose-built unit). Since then, it has been expanded to include a total of 7 standard guest-rooms (as 5 stand-alone purpose-built buildings) and 1 guide-room inside the existing farm-house. The farm-house and guest rooms are built around a large garden with lawn, which has existed since before the inception of the Guest Farm. The Guest Farm provides short-term tourist accommodation (1-7 nights), breakfasts, dinners, alcoholic and non-alcoholic beverages, and lunch on request. Farm-drives (2 hours) on Vreugde Farm, and guided drives to Etosha (half- or full-day) are offered as optional activities.

Other infrastructure purpose-built as part of the Guest Farm include one small and one large lapa, a 'boma' fireplace, and swimming pool with shade-lapa. Accommodation for the management couple was also purpose-built in 2010. All other infrastructure (slaughter-room, laundry, garages) pre-dated the inception of the Guest Farm. The entire Guest-Farm site is enclosed with a high fence.

Water is pumped directly from the water-table using windmills, with a back-up electric water pump used temporarily only when wind-power proves insufficient. Water is extracted from three boreholes located within 250m of the Guest Farm premises. The water-table lies at approximately 8m below ground and the boreholes are bored to a depth of approximately 40m. The water-table is stable and has never been known to sink below 15m, even during extended droughts. Water is stored temporarily in sealed tanks before being distributed to the rooms by underground pipes. An electric pressure-pump, which switches on on-demand, helps provide sufficient water pressure.

Electricity is available full-time and is provided by a single-phase line by Epacha Powerline, a subsidiary of Cenored. Two small back-up petrol generators are located on-site for temporary use in case of power outages. Cooking is on gas-stoves, and bathroom water is currently heated using electric-geysers.

All wash-basins, sinks, showers, baths and toilets drain into two-compartment septic tanks, each tank being supplied by no more than two accommodation units. Guest rooms are built to maximise natural through-flow of ventilation. No air-conditioning units are installed; guest rooms, kitchen, dining room and office have ceiling-fans only. Rooms do not have built-in heaters; guests are provided with extra blankets and hot-water bottles in the winter months.



Map of Vreugde Guest Farm site, with main infrastructure features labelled.

Potential impacts on the environment

As with all tourist activities, the Guest Farm has numerous potential impacts on the environment, including those of noise and light pollution, over-utilisation of natural resources including ground-water, ground-water contamination, solid-waste pollution through inappropriate disposal of waste, and excessive disturbance of the indigenous wildlife.

This Environmental Management Plan aims to address all of these potential risks, and to outline ways of mitigating these risks by listing all of the ways in which Vreugde Guest Farm management, staff and guests can reduce their impact on the environment, and the impact thereon of the day-to-day running of the Guest Farm.

The objectives and strategies listed below should serve as best-practice guidelines for everyone working at the Guest Farm, and the implementation of these will be actively reinforced, and regularly assessed, and any shortcomings will be addressed with the relevant personnel.

N.B. Sections or text in red are new or updated in 2020.

Biodiversity and natural resource management

Principles and Aims: to minimise the disruptive impact of the day-to-day running of the Guest Farm business on the wildlife on both the immediate premises and on the surrounding land. To utilise natural resources only in a considerate and sustainable manner, and to harvest game animals in a way that is ethically sound.

Specific Objectives and Strategies:

A. Natural resource use:

1. **Harvesting of game animals:** wherever possible, only mature male animals (kudu, oryx and warthog only) will be harvested, leaving females and young to replenish the population, **and only when populations of such animals are deemed to be sufficient to allow for sustainable harvesting.** Animals must be shot cleanly, with no risks taken that might result in the unnecessary wounding of an animal.
2. **Harvesting of wood:** fire-wood collected both for the Guest Farm and for staff use must preferentially be taken from trees that have died naturally or which have been killed or cleared for other purposes (de-bushing, or fence-line or power-line clearing).
3. **Use of sustainable local building resources:** utilise rock and gravel, as well as sustainably harvested mopane wood, sourced from the farm and immediate area, for landscaping, building and decoration in the garden where possible, in order to minimise the need for importing wood or using cement and concrete-based materials for such purposes.
4. **Utilisation of bamboo:** utilise the bamboo (*Bambusa balcoa*, an alien species) that has been growing in the Guest Farm garden for the past 40 years, as a resource for use in the vegetable garden and as decoration (in the place of wood), where possible.
5. **Inform and educate guests on farm drives** about sustainable resource use and regenerative farming.

B. Biodiversity management:

1. **Treatment of wild animals:** wild animals may not be killed, collected, trapped or caged by anyone on the Vreugde Guest Farm premises or the surrounding farmland for any purposes other than human consumption (see point A1, above) or defence of human or livestock life.
2. **Encouraging wild animals into the garden:** clean water will always be provided in the garden for birds and other small animals, **as well as bird-seed for the bird-life.** Local **wildlife** diversity will be regularly observed and recorded, and submitted to the SABAP Bird Atlassing **and EIS Atlassing** databases.
3. **Veld monitoring and management:** grazing-land on the farm will be monitored yearly and assessed in terms of veld degradation versus recovery, estimated biomass, and carrying capacity, in order to manage the grazing sustainably by avoiding over-exploitation. Results of the monitoring will be used to plan annual adjustments to stock numbers and to inform a rotational grazing scheme with extended rest-periods to allow for veld recovery and growth between grazing periods.

Exotic plants and pest control

Principles and Aims: to ultimately eliminate all invasive exotic plants from the Guest Farm grounds, and to prevent the introduction of further invasive exotic plants. To utilise primarily physical means of removing exotic plants and pests, resorting to the use of chemical control only in extreme circumstances.

Specific Objectives and Strategies:

A. Exotic plant control:

1. **Ongoing removal:** all invasive exotic plants on the Guest Farm grounds will be removed manually each year before they set seed.
2. **New exotic plants:** plants introduced into the garden must be selected as non-invasive species, and any new invasive exotic plant seen on the grounds must be removed immediately before it has a chance to establish itself. All staff must be taught to recognise alien invasive plant species.

B. Pest control:

1. **Pesticides:** the use of pesticides will only be permitted when the targeted pests are a threat to the Guest Farm infrastructure (e.g. wood-eating termites), or to human or livestock health (e.g. mosquitoes, fleas and ticks), or are causing extensive and unsightly damage to the lawn. Use of pesticides will be carried out safely and appropriately. Pesticides will not be used on plants for human consumption (e.g. vegetable and fruit plants). **Net tunnels to be used to cover vegetable production in order to keep out insect pests, and consequently avoid the need for pesticides.**
2. **Rodent control:** cats will be kept on site for rodent control, so that no poison is needed.
3. **Insect control:** ensure fly-screens on windows and doors must be well-maintained and kept closed, so as to reduce the need for insecticides. Food-waste must be removed and disposed of immediately so as not to attract ants and other insect pests.

Energy and Water management

Principles and Aims: to minimise energy and water use, to continually explore ways of further minimising and optimising energy and water use, and to encourage all staff and guests to do the same.

Specific Objectives and Strategies:

A. Water production and use:

1. **Toilets:** newly installed or replacement toilets should be of the dual-flush type. Any leakage of water into the toilet bowl must be attended to immediately.
2. **Garden:** watering of the lawns and flower-beds should be carried out in the coolest (first) hours of the day in order to minimise evaporative loss. Restrict any further expansion of the lawn. **Parts of the lawn to be replaced by gravel in order to further limit the extent of the lawn. Install automatic-sprayers to cover as much of the garden as possible, in order to utilise only as much water as is necessary to water each part of the lawn and to be able to water during the night. Use**

drip-irrigation to water fruit and vegetables plants to minimise evaporative water loss and deliver water only where and when needed.

3. **Laundry:** all laundry should be done with cold, not hot, water, and the waste water from washing machines should be re-used to irrigate garden trees and bamboo.
4. **General:** all leaks must be fixed immediately, and all staff need to be aware that they should report any leaks or breakages immediately. Where possible, utilise grey water from wash-basins etc. for watering the garden.
5. **Drinking water:** encourage guests to drink the water produced on-site, rather than bottled water, and to re-fill their water bottles on site.

B. Energy use:

1. **Pumping of water:** rely insofar as possible on wind-pumping of water, using the electrical water-pump only when the wind is insufficient to pump enough water for the Guest Farm's needs.
2. **Geysers:** turn off all the geysers of guest-rooms and private living-quarters that are not being used. Turn down the geyser thermostats to 55°C, even less in the summer months, if possible. Install thermal insulation around the hot-water tanks in order to reduce heat-loss.
3. **Refrigerators and Freezers:** Keep refrigerators at an appropriate temperature – not too cold – and minimise the amount of time that refrigerator and freezer doors are open. If meat-stock is low, then transfer all meat to one freezer, so that another freezer can be switched off. Ensure that seals are intact and replace as appropriate.
4. **Lights:** use only energy-saver or LED light-bulbs insofar as possible. Switch off lights where they are not needed, and utilise a timer switch for the garden lights so that they are only on for a few hours each morning and evening. Do not using any up-lighting outside.
5. **Cooking:** use primarily gas stoves for cooking, rather than electrical stoves or ovens.
6. **Solar energy:** continue to explore affordable options for installing solar or photovoltaic energy and solar water heating systems.
7. **Vehicles:** choose the most-energy-efficient vehicle for trips to town whenever possible.
8. **Measurables:** Aim for a year-on-year decrease in average monthly kWh used per capita bed-night.

Waste management

Principles and Aims: to minimise waste production, optimise waste sorting and disposal, minimise pollution through inappropriate waste management, and encourage good waste management practices by all staff and their families.

Specific Objectives and Strategies:

A. Minimising waste production:

1. **Purchasing:** wherever possible, buy local produce and buy in bulk in order to minimise the use of unnecessary packaging. On every shopping-trip, take cool-boxes, large re-usable shopping bags and plastic crates for packing the shopping, to completely avoid the use of disposable plastic

shopping bags. Produce more of own vegetable and fruit produce, in order to further reduce packaging and the transport of produce.

2. **Storage:** wherever possible, store foods in sealed re-usable containers rather than plastic bags or cling-wrap.
3. **Packed-lunches:** use re-usable boxes (Tupperware), proper plates and proper cutlery for packed lunches if guests are returning that day, and the same for our Guided Etosha-Tour. No disposables to be used in such situations. Minimise plastic disposables used for packed-lunches for guests that are not returning that day (e.g. use wooden forks and knives; use paper plates, not plastic; paper-bags not plastic).

B. Optimisation of waste sorting and disposal:

All staff are expected to adhere to the following, both on the Guest Farm premises and at home:

1. **Kitchen fats and oils:** these are to be removed from pots and pans using absorbent paper, which is then to be disposed of with the rest of the kitchen waste in black refuse sacks (see point 3), so as to minimise the washing of fats and oils into the sewerage tanks.
2. **Carcasses and bones:** with the exception of the skins from carcasses, which can be salted and dried for re-sale, all inedible parts of animal carcasses (e.g. bones, hooves) must be sealed in refuse sacks or salt-sacks, stored securely out of reach of dogs or pests, and taken to the municipal waste-ground on a regular basis.
3. **Other kitchen waste:** all other kitchen waste is to be disposed of in strong black refuse sacks, except for organic waste that can be safely fed to the domestic animals (e.g. to the dogs and chickens) or added to compost heaps. Black refuse sacks are to be removed from the kitchen on a daily basis and stored in a secure cage where pests cannot access the bags and their contents. Sacks are to be taken to the municipal waste-ground in Outjo on a weekly or fortnightly basis.
4. **Paper, card and other harmless combustibles:** re-use scrap paper that has only been printed on one side. Disposal of office waste and kitchen packaging should be in a separate black refuse sack, to be burnt on-site (at a safe distance from houses and taking into account the prevailing wind-direction to avoid the risk of smoke inhalation by the inhabitants). Absolutely no items that cannot be safely burnt to ash are to be included with this waste.
5. **Garden waste:** all grass-cuttings and other garden waste are to be either fed to the livestock or added to compost heaps, as appropriate. Compost is to be used in the garden to provide organic feed and mulch for vegetable and fruit plants.
6. **Hazardous waste:** any expired medical or veterinary products, flammable liquids, paints, thinners, car batteries or other toxic waste, must not be disposed of in black refuse sacks, but instead must be stored in a secure location until they can be removed to an appropriate hazardous waste disposal site.
7. **E-Waste:** to be taken to Windhoek and donated to the Dagbreek School E-Waste collection point.
8. **All other waste:** all other waste is to be stored safely until it can be removed from the site to the municipal waste ground in Outjo. Staff household waste will also be transported off-site.
9. **Transport of waste:** when packing waste onto a vehicle for transport, the waste must be packed tightly and securely, so that no waste can blow off or fall off the vehicle during transport.

10. **Recycling of waste:** opportunities for the collection/delivery of recyclable waste are to be sought and exploited whenever possible. Keep reusable food storage containers such as bottles, pots, jars and tubs for re-use.
11. **Human waste:** all toilets, including staff toilets, must be flush toilets connected to a two-compartment septic tank. No foreign objects must be disposed of into toilets, and the use of strong astringent chemicals in toilets should be limited so as to not disrupt the bacterial balance of the septic tanks.
12. **Littering:** this must be strongly discouraged, and clean staff households and gardens should be encouraged by incentives such as “tidiest household” prizes offered on an intermittent basis.

Staff management, development, and training

Principles and Aims: to ensure that employees are at all times adequately trained to carry out the duties expected of them, and to provide them with additional training where required. Aim to be able to delegate increasingly to the non-management staff and in so-doing promote self-advancement and skills development by all employees.

Specific Objectives and Strategies:

A. Staff training:

1. Continually assess staff strengths and weaknesses and identify employee training needs.
2. Seek further opportunities for additional staff-training off-site wherever possible.
3. Encourage employees to come forward with ideas on filling skills-gaps, areas where they would like to learn more.
4. Encourage a healthy lifestyle among employees.

B. Staff management

1. **General:** ensure all employees conduct themselves in a manner that respects guests’ privacy and enjoyment and which doesn’t produce excessive noise. Ensure that employees help to keep the Guest Farm premises clean and tidy at all times, regardless of the work being carried out. Ensure that employees are environmentally aware and that they have a good attitude towards native animals and plants.
2. **Guiding:** ensure guides are sufficiently trained, and conduct themselves and their tours in a manner respectful of the guests, the environment, and the country (as an ‘ambassador’ for Namibia).
3. **Away-days and Educational:** organise a staff away-day or Educational once a year to give the employees a chance to experience for themselves some of the local tourist highlights or to see how other tourist establishments are run.

Social responsibility projects

Principles and Aims: to foster good relations with the local community by engaging in projects that we feel have value, and to give an opportunity to the Guest Farm's guests to give something back to Namibia by contributing to such projects.

Specific Objectives and Strategies:

1. **Donations:** Contribute directly to the local Hai//kom resettlement community by purchasing grocery, sanitary and school supplies for the Dawid Khamuxab primary school and its pupils, and by sponsoring the continued (higher) education of a few select promising students, using funds donated by friends and guests of the Guest Farm. Reliably manage these funds and report back to donors on a regular basis.
2. **Facilitation:** Facilitate contributions by international charities to the local community and the school, by acting as local collaborator, setting up communications between the relevant bodies and providing logistical support where possible.
3. **Employment of locals:** preferentially employ locals for both permanent and temporary positions at the Guest Farm, and preferentially utilise the services of local small businesses and entrepreneurs.
4. **Guest awareness:** provide accurate information about the local community to the guests of the Guest Farm. Stock locally-produced crafts as curios for sale to the guests. **Provide relevant information to guests wanting to contribute to local charities.**