

Contacts

For Devil's Claw harvesting permit applications, advice and assistance,
please contact the following:

Ministry of Environment and Tourism office - (Windhoek)

Directorate Scientific Services - Tel (061) 284 2568

OR

Your nearest Ministry of Environment & Tourism office

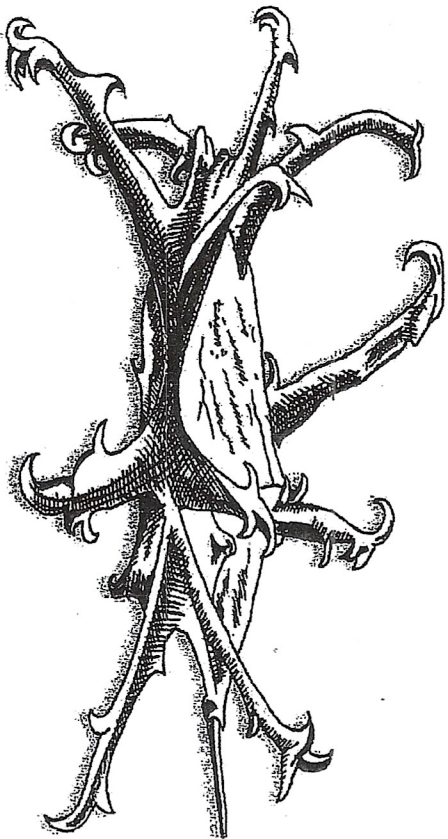
You can also contact CRIAA SA-DC

for advice and assistance - Tel (061) 220 117

This pamphlet is the Initiative of the Devil's Claw Working Group
and the Ministry of Environment and Tourism
and was prepared by CRIAA SA-DC. It was funded by
the German Federal Agency for Nature Conservation.

Devil's Claw

in Namibia



**Guidelines
for Harvesters**

Whose resource is Devil's Claw?

Devil's Claw is a plant that grows in Namibia. It is also found in some parts of other southern African countries, but Namibia has by far the most Devil's Claw. Indigenous people have used Devil's Claw in Namibia for thousands of years. It contains a special medicine that is very good, especially for treating sore bones and joints. Now people in other countries like Germany have also found out how good it is. This is good, because Devil's Claw can be sold to these countries, and Namibians can make some money by harvesting and processing it. But it also means that we all have to be careful not to harvest too much Devil's Claw: if we do harvest too much, there will be none left for future generations. Devil's Claw is a national resource - it belongs to the whole nation, but there isn't enough Devil's Claw for everyone to harvest. This is why nobody is allowed to harvest Devil's Claw without a permit, or to harvest in such a way that the plant dies. It is possible to harvest enough Devil's Claw and still protect the resource. This booklet gives the most important information about:

- how to get a permit to harvest Devil's Claw;
- why the permit system is important;
- what parts of the Devil's Claw to harvest, so that the plant survives;
- how to cut and dry the Devil's Claw;
- how to store and pack the dried Devil's Claw; and
- how to keep records of how much is harvested and sold.

**Devil's Claw is a national resource -
people who harvest without a permit
are stealing from the nation**

How to get a permit

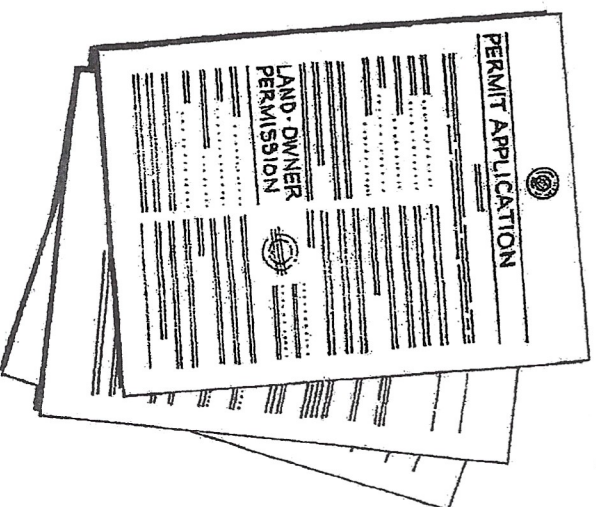
Anybody who wants to harvest Devil's Claw must first get a harvesting permit. A permit can be for one harvester, or for a group of harvesters.

Step 1: Get the form for a permit to harvest Devil's Claw from the nearest Ministry of Environment and Tourism (MET) office. Fill in all your personal details.

Step 2: You must know where you want to harvest Devil's Claw, and who controls that land. Ask the tribal authority, local authority or land owner for permission to harvest. They must sign the application form.

Step 3: Go back to the MET office with the filled-in application form and your identity document. If you want the permit for a group of harvesters, you must say who they are, so that their names can be included on the permit. If you were given a permit for the previous season, you must have completed the Harvesters' Return Form (see next page.)

The MET will then consider your application. If everything is in order, they will issue a permit. The permit will only be valid for the people whose names appear on it, and for harvesting in a specific area.



Why do permits matter?

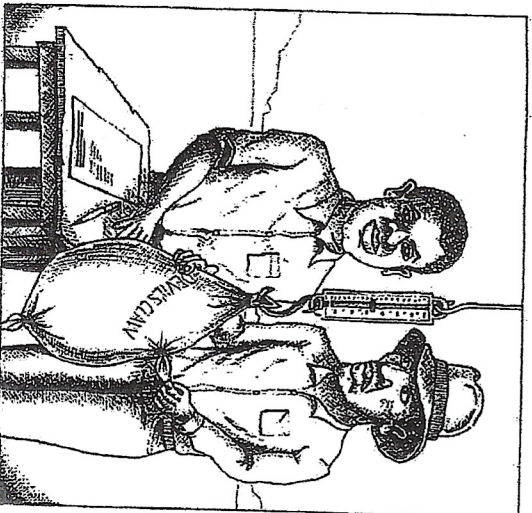
Permits are not required just to make things difficult for harvesters - they are there to protect the Devil's Claw resource for the future. A Devil's Claw harvesting permit states:

- who may harvest;
- where they may harvest; and
- when harvesting may take place (from 1st March to 31st October, but it is better to wait until the rainy season has ended).

Harvesters' "Return Forms"

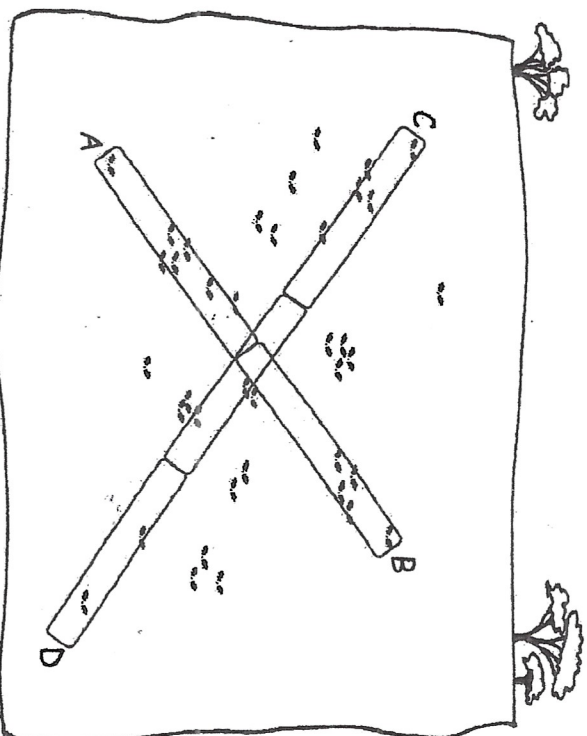
Every time harvesters sell Devil's Claw to buyers/exporters (who also need permits), they must fill out the Harvesters' Return Form, which is on the back of the harvesting permit. This records the date of the sale, the details of the buyer, and the species, number of bags and weight of Devil's Claw sold.

The form must be handed in to the MET by the end of November. Information on this form is very important: by filling it out accurately every time you sell Devil's Claw, you will help to protect the resource.



How much resource is there this year?

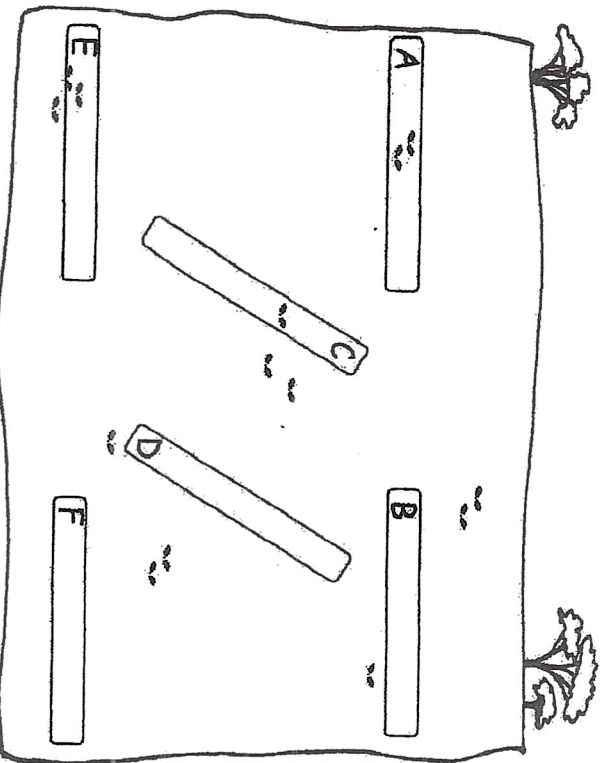
Example 1: Can you find a great number of plants, often in larger groups, in a relatively small area as in the diagram below?



Then...

- Step 1:** Get somebody to walk in a straight line in front of you and count off 100 steps at a time, starting at the first Devil's Claw plant:
- Step 2:** From point A, in a line not wider than your arms when stretched out, count all Devil's Claw plants for every 100 steps, until no more plants are found (point B) (assume direction E-W):
- A to B = 200 steps = 7 + 5 Devil's Claw plants.
- Step 3:** Repeat, this time in a line perpendicular to the first line (assume direction N-S):
- C to D = 300 steps = 5 + 2 + 2 Devil's Claw plants.

Example 2: Do you find a few plants, often in small groups over a relatively large area, e.g. a camp, as shown in the diagram below?



Step 1: From a random point, walk in a straight line for 100 steps.

Step 2: For each 100 steps, in a line not wider than your arms stretched out, count all Devil's Claw plants:

→ Line A = 100 Steps = 2 Devil's Claw plants.

Then walk at least 100 steps further; then repeat the count.

→ Line B = 100 steps = 0 Devil's Claw plants.

Step 3: Repeat step 2 at least another 2 times:

→ Line C = 100 steps = 1 Devil's Claw plants.

→ Line D = 100 steps = 0 Devil's Claw plants.

→ Line E = 100 steps = 2 Devil's Claw plants.

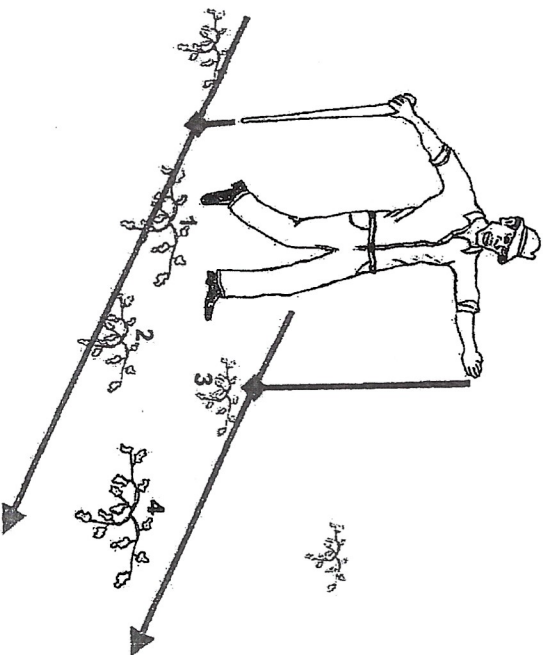
→ Line F = 100 steps = 0 Devil's Claw plants.

Step 4: How large is the camp or area?



→ For example $600m \times 600m$.

Things to remember when counting your resource

- Devil's Claw plants need to recover for 3 years after they have been harvested, so count only the plants you will be harvesting this year, roughly one quarter of your total resource.
- Count the Devil's Claw plants for your harvest during late January, before you get your harvesting permit.
- You are encouraged to walk double the amount of line transects shown in the examples for a more accurate estimate of your resource.
- Always write down or sketch in detail where the Devil's Claw patches are that you have counted, or which area you intend to harvest this year.
- Only count the plants rooted within the line-width corresponding to the width of your stretched-out arms, as shown below.

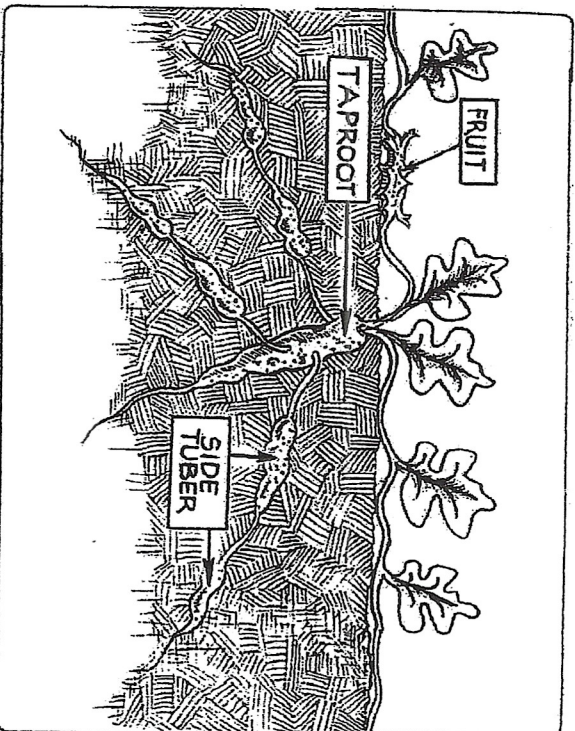


Devil's Claw Resource Survey Sheet

| | | |
|--|---|----------------------------------|
| Date: | Region: | GPS Reading (if available): |
| Surveyor: | District: | " S |
| Owner/Harvester: | Farm name/Area name | Area or site description: " E |
| Mark following with x: | | |
| Access: | In close vicinity to homestead? | |
| Commercial/Private: | On outskirts (old or new) fenced field | |
| Nature Reserve: | On roadside, below power line or other cleared area | |
| Communal resettlement farm: | On open grassland or area with very sparse vegetation | |
| Communal but restricted access: | Area with less than (20%) bush density | |
| Communal and accessible to all: | Area with or more bush (over 20%) - bush 1 to 5m high | |
| Other: | Woodland (mostly trees over 5m high) with dense understorey shrubs | |
| Devil's Claw distribution: | Species: | |
| Small area - maybe up to several 100m wide and long with dense patches of plants (as in Example 1) |  | <i>Harpagophytum procumbens</i> |
| Larger area, often 1 km, with scattered clumps of 1-10 plants (as in Example 2) |  | <i>Harpagophytum</i> |
| Walk No | Direction | No of steps walked |
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| | | |
| | | |
| | | |
| | | |
| Harvesting Record at the specific site: (Mark with x) | | |
| Plants are harvested here every year | | |
| Plants are harvested here regularly every 4 th year | | |
| Plants will be harvested here for the first time, then annually | | |
| Plants will be harvested here for the first time, then every 4 th year | | |



How to harvest Devil's Claw

Devil's Claw has a main taproot growing down from where the stems and leaves grow above the ground. The side tubers grow off this main taproot. People want to buy Devil's Claw because of a substance (called harpagoside) that is a very good medicine. This substance is only found in the side tubers - there is almost none in the taproot.



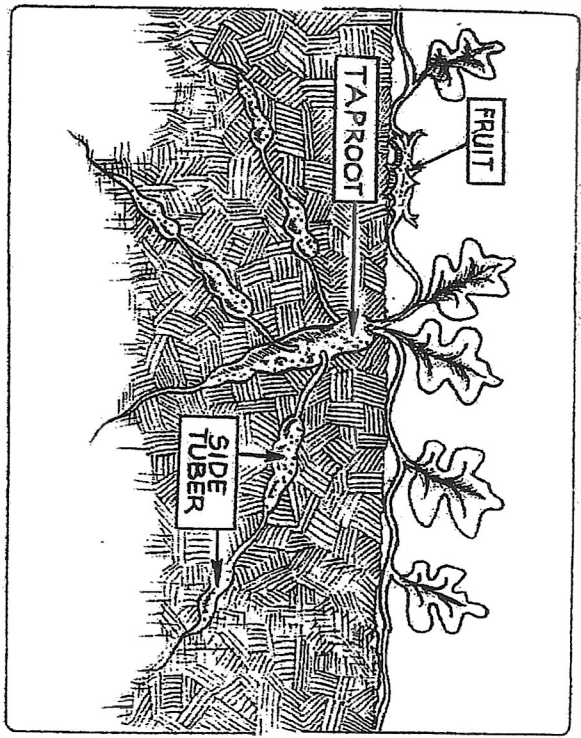
When you harvest a fruit tree, you don't chop down the whole tree to get the fruit - you take the fruit without killing the tree, so that the tree will be able to give more fruit in the future. Likewise, "sustainable harvesting" of Devil's Claw will allow the plant to give many more harvests in the future. The side tubers store water and food for the plant to survive during the dry season. Only half of the side tubers should be harvested - if they are all taken, the plant will die. So harvesting the taproot is wrong for two reasons: it kills the Devil's Claw plant, and the taproot is useless for selling.

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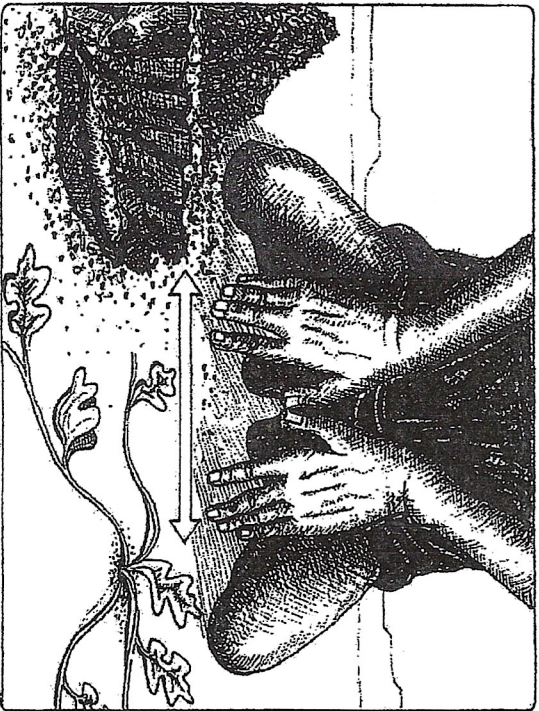


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How to dig

It is important to dig out the Devil's Claw tubers in the correct way. **If the main root is damaged or removed, the plant will die.**

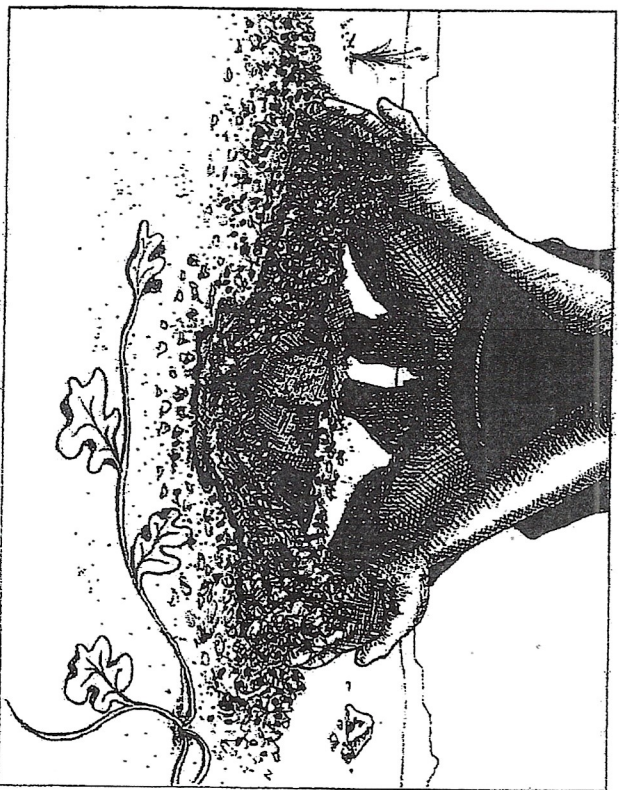
- The best way to avoid causing damage is to use a strong sharpened stick, or a flattened crowbar. Using a spade is faster, but it can easily damage the main root and slice through the side tubers. If you do use a spade, you should take extra care not to damage the main root.
- Dig about 20cm away from the plant. This will help to protect the main root (20cm is about the height of this book).
- Only dig on one side of the plant. Remember that at least half of the side tubers should be left alone. It may be tempting to take all the side tubers, but if you do this, the plant will die.
- Choose older Devil's Claw plants to harvest. They usually have longer stems and leaves. Leave the younger plants alone.



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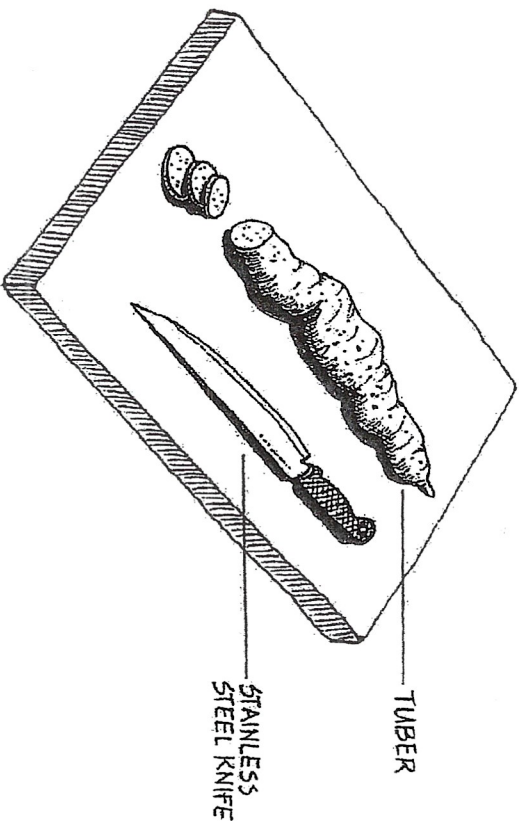
Filling in the hole

- When you have finished harvesting the side tubers, you must put all the sand that you have dug out back into the hole.
- Leaving an open hole is also very dangerous for wild animals and cattle. They could easily trip in an open hole and break a leg.
- Stamp down on the sand after you have put it back.
- If you don't fill in the hole, the Devil's Claw plant will die.



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Slicing and quality



Namibian Devil's Claw is sold on the international market, mainly in Europe. It is very important to maintain high quality standards - low quality Devil's Claw is worth less money, and may be rejected.

Wait till after the rainy season before slicing the side tubers, otherwise they may become rotten. You can store them in a cool dry room, or bury them in the sand.

Before starting to slice the Devil's Claw, wash your hands thoroughly.

Remove all the sand from the side tubers. If possible, wash them with fresh water before cutting them. The slices should be quite thin - no more than about twice as thick as a matchstick.

Only use a clean, sharp stainless steel knife to slice the side tubers. If parts of the side tuber are rotten or damaged, you should cut them out.

Make sure that no foreign substances (other vegetable matter, sand and dirt) get mixed in with the Devil's Claw.

Drying the sliced tubers

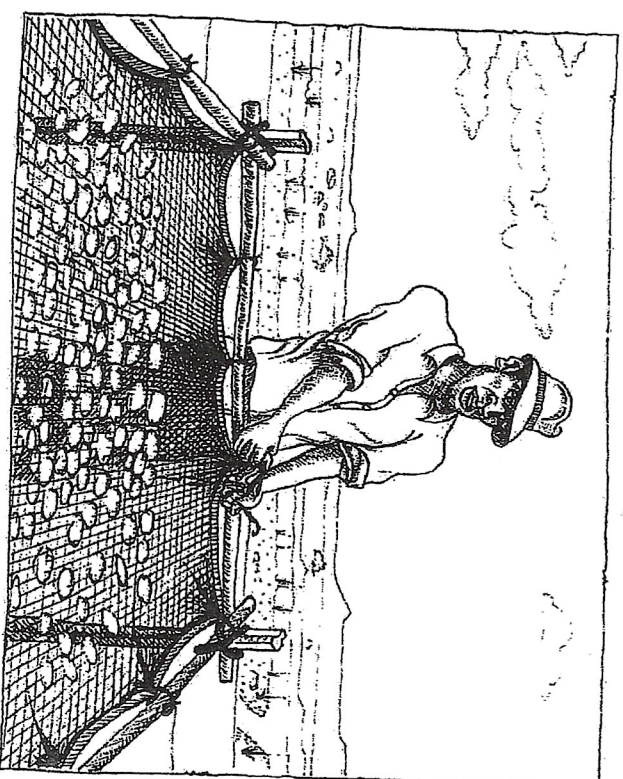
Devil's Claw must be properly dried before it is packed into bags. If the side tubers are still wet, they will rot and will be worth nothing.

You will need some shade netting that is lifted off the ground. This will keep the sliced Devil's Claw away from sand, dirt and animal droppings. It will also allow the Devil's Claw to dry from underneath. It is a good idea to try and put the nets in a place that is shaded (like under or next to a tree).

Once you have sliced the Devil's Claw side tubers, carefully lay them out on the shade netting. The slices must not lie on top of each other.

Leave the sliced side tubers on the shade netting for at least seven days. The slices must be completely dry before they are packed.

Once the slices are dry, they must not be allowed to get wet again. This is why it is best to wait until after the rainy season before cutting and drying.

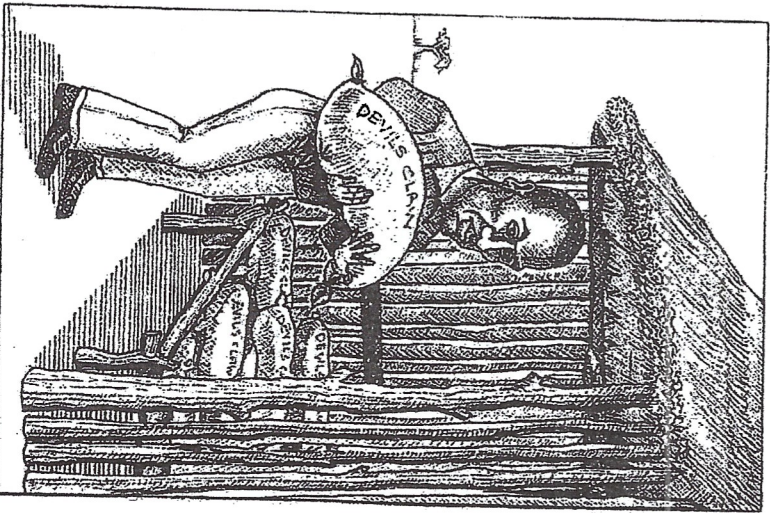


Packing and storing

Once the sliced Devil's Claw has been properly dried, it can be packed in bags. The slices are properly dry if you can snap them cleanly into two pieces. If they bend, they are not yet dry enough.

Only use new bags that are clean and dry. Do not use old bags - they will probably have been used for fertilisers, animal manure, poisons, animal feed or other plants, and they will ruin your Devil's Claw.

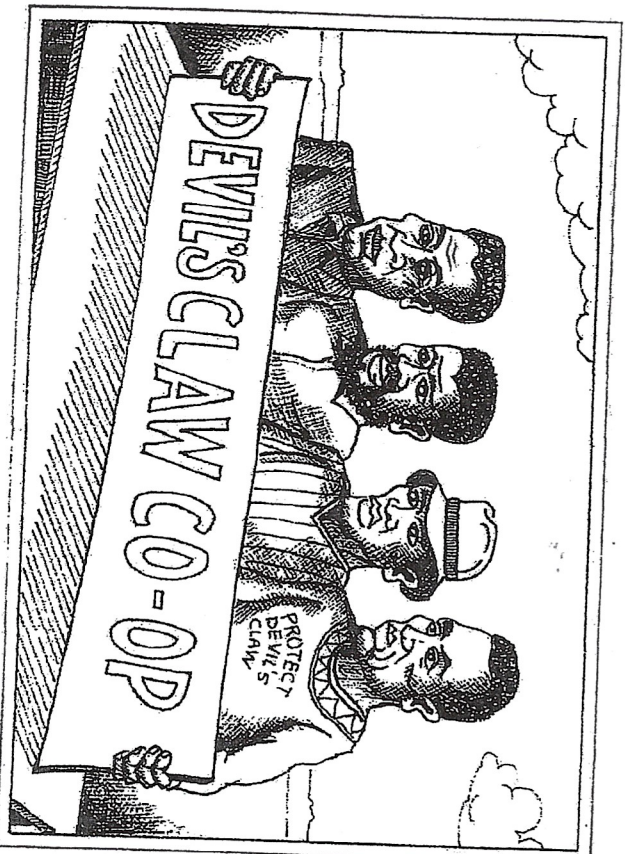
Store the bags in a clean, dry place so that the bags are not directly on the floor. Make sure that no animals can come near to the stored bags.



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Make the most of the Devil's Claw resource...

- A high-quality product brings in more money.
- Keep records of weights of dried tubers (not just how many bags), when and to whom they were sold, and for how much (you need this information for the report back form).
- Harvesters who work together in a group can make sure they get a fair price from Devil's Claw buyers. Find a buyer before you harvest, so that you know how much to harvest, and what price you will be paid.
- Devil's Claw is a Namibian product - take pride in producing a quality product and protecting the resource.



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