

Water Matters

Phil Maker

Remote Operations, Power Water

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Abstract

Finding water in the North including transpiration, distillation, clarification and purification.

Introduction

- ▶ What: water and bushcraft.



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A wee question

Question 0: Your Cessna has force landed on an unmarked airstrip, which of the items on the table do you want in which order.

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- ▶ So how far can you get (or last) with 5L of water?

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- ▶ So how far can you get (or last) with 5L of water?
- ▶ And 20L?

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 - ▶ Condys Crystal ($KMnO_4$) - pink to drink (very light pink)!
 - ▶ Iodine solutions in first aid kits.
 - ▶ UV/moderate temperatures (30min at 70deg C + UV sun).

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- ▶ Beach dunes: Casuarinas are indicator species.
- ▶ Cliffs/spring: using rope/cloth to collect.
- ▶ Underground creeks at low tide.
- ▶ Morning dew.

Still 1



- ▶ Wash the containers with rock/sand.

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- ▶ Boil the water.

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- ▶ Boil the water.
- ▶ Condense in the bag.
- ▶ MUST have a pressure release valve, this is dangerous.
- ▶ Temperature difference drives this, gentle boil, do NOT overboil, reflector: termite mounds, ...

Still 2

- ▶ Consider how you are going to refill it (bung).



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- ▶ Consider how you are going to refill it (bung).
- ▶ After a number of boils it get too salty so you must wash it out and start over again.
- ▶ Constantly check for leaks or ways to make it work better.
- ▶ One person runs it at all times.

Arizona Desert Still



- ▶ A pit, water condenses on the top and drips into the central container.

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- ▶ And it does NOT work in Northern Australia (or Arizona really)
- ▶ Why/How to test it?

Transpiration

- ▶ This is the most effective method.



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- ▶ Perhaps 300-500ml/day.

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- ▶ Pick a suitable tree (not ironwood, mangroves...)
- ▶ Sunny, wet ground.
- ▶ Clean it, Bend it over, make a Sump, come back when cold

Signs and Indicators



- ▶ GPS and a map!

Pandanus

Indicates water

Fresh salad (walking tucker)

Edible nuts (with an axe)

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- ▶ Windmills/bores including survey bores.

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What else is in bushcraft



- ▶ Planning, psychology, ... (90% of survival).

Mors Kochanski - “the more you know, the less you need”

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- ▶ Planning, psychology, ... (90% of survival).
- ▶ Water: collection,
- ▶ Food: collection, preparation, preservation
- ▶ Fire: traditional methods, chemical, ...
- ▶ Navigation: by day and night.
- ▶ Building things: string, tools, shelter, fires,

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- ▶ Rescue: the most important one.

Other sources



- ▶ Richard Graves: “Bushcraft”

*Cody Lundin – “over time,
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- ▶ Steve Ellis, Rick Clifford, Pop Dawes, ...

Conclusion



- ▶ What if, so what...
- ▶ You should practise at least:

Daly River ladies teaching.
90% of survival is womens business

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