

**Winning battles, but not  
the war**

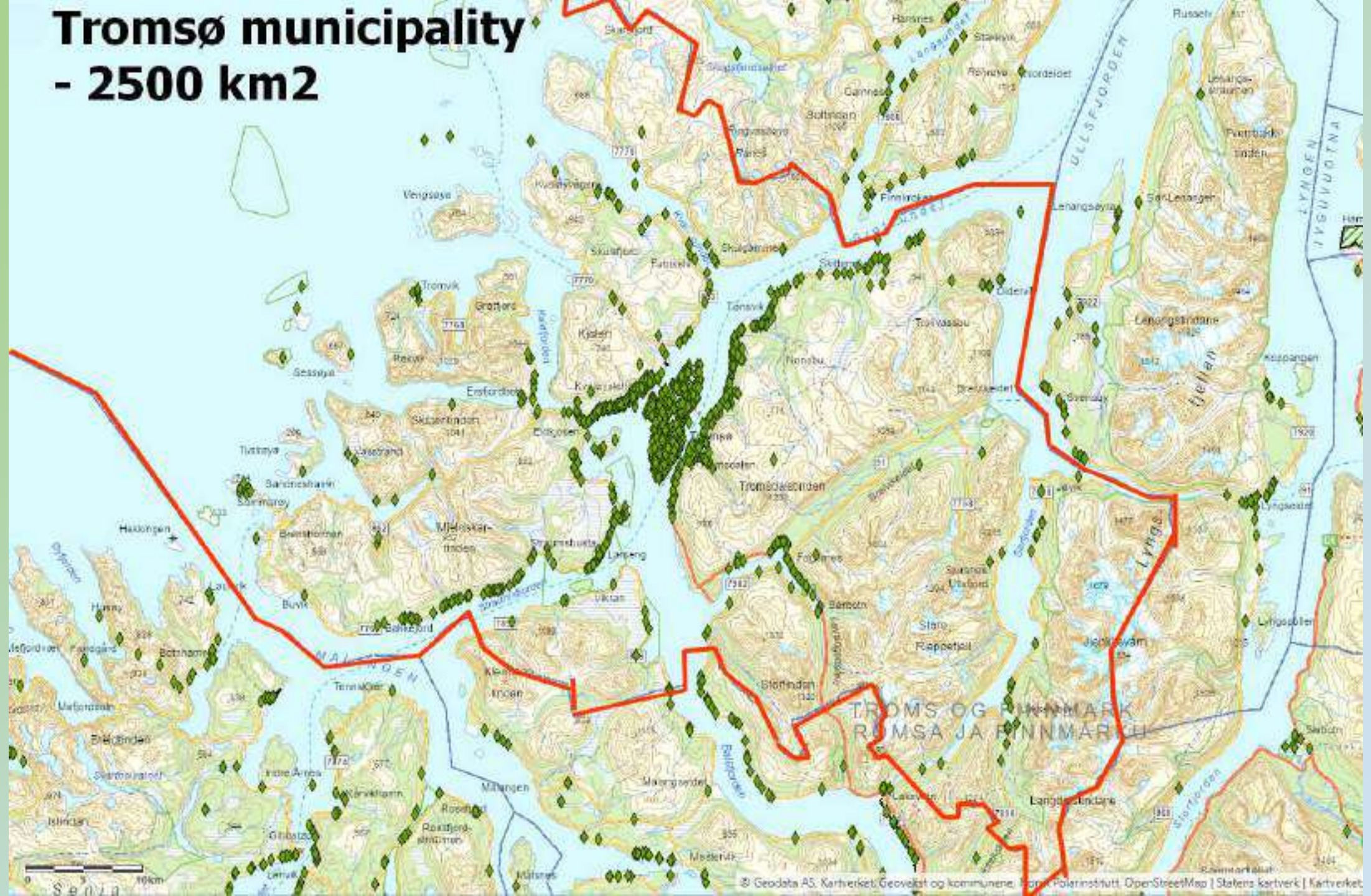
-

**managing invasive species  
in Tromsø**



# Tromsø municipality

- 2500 km<sup>2</sup>





# Invasive species in Tromsø

A large municipality with ~78.000 people. Most live close to Tromsø town, but also many smaller settlements, and habitation along much of our coastline. Invasive species are found mostly around present and former settlements but also along roads, as expected.

Many former farms along the coast and on the larger islands are now left completely, or used as holiday homes, but the species brought there for pleasure are still thriving, and among them several invasive species.

We have most of the «usual suspects» around, and some have been around for a long time:

Tromsøpalme – *Heracleum persicum*

Giant hogweed – *Heracleum mantegazzianum*

Lupins

Himalayan balsam

Knotweeds

Sitka spruce

Giant butterbur – *Petasites japonicus*

Perennial cormflower – *Centaurea montana*

++



















# Lupins





# Giant knotweed





# Himalayan balsam





Former pasture  
with tromsøpalme





We have no general plan on how to deal with invasive species.

On municipal land we are currently mapping invasive species, and are trying to come up with a more specific plan of action on how to deal with this problem. It is obvious that we can not deal with all species and locations.

Hotspots and areas of high natural and public value will have to be prioritized.

Our work towards the public is not very coherent, and to a large extent we rely on springtime newspaper articles, and generally available information.

Still, we have had some success in one project:

In 2010 we identified palm populations on formerly inhabited islands, and in parks and land of high value to the public, and started a long term removal project.



# Removal of Tromsø palm on former farmlands, an on land of high value to the public.









Håja





Gåsvær





A very simple and unbureaucratic approach

On the remote islands:

We join the Nature Inspectorate 2-3 times each season for inspection and removal.  
And some voluntary work.

Close to town:

We hire summer helpers for the job.

A quick lesson in palm removal

Maps

Spade, gloves and boots.

And then we dig.



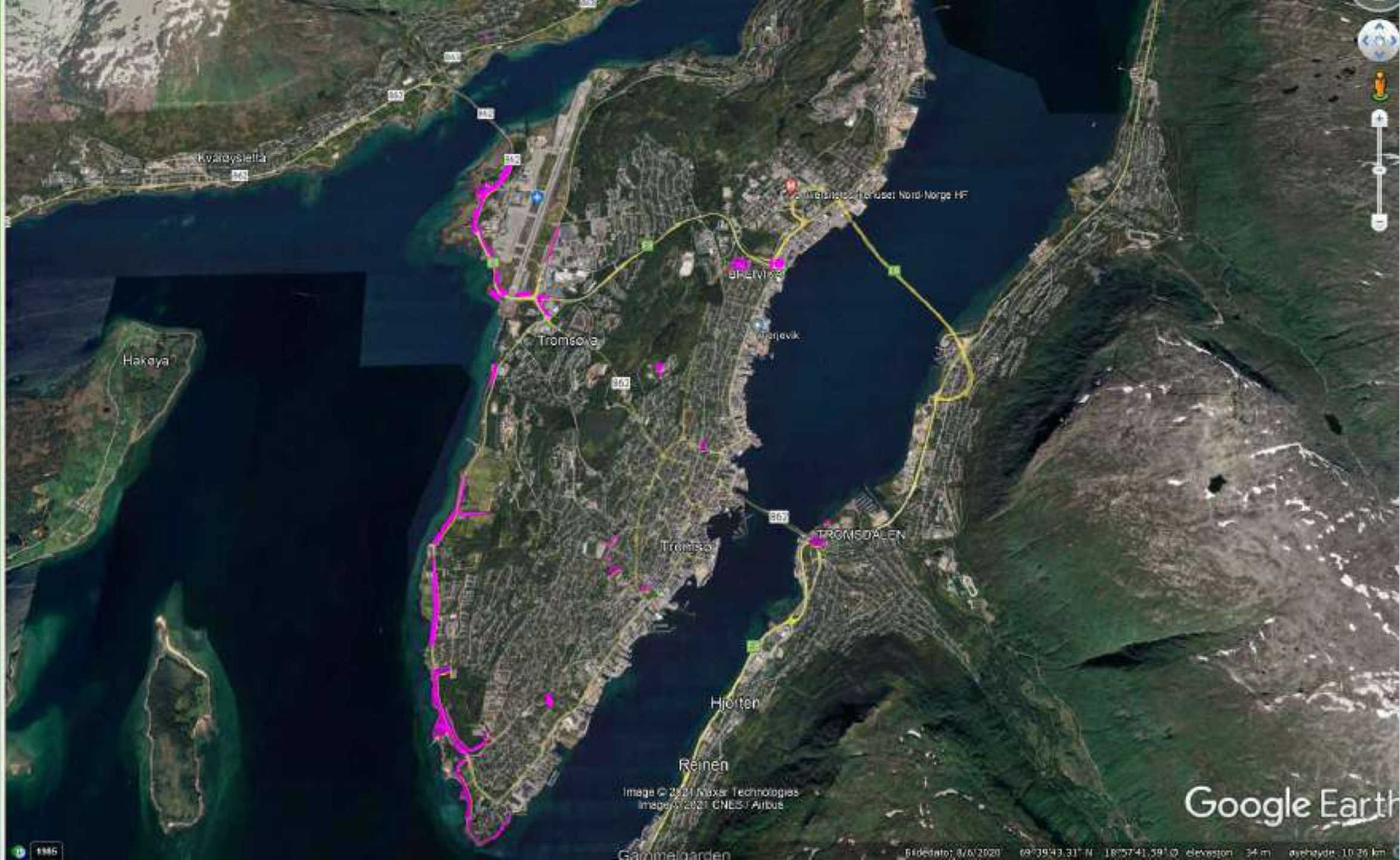


Image © 2021 Maxar Technologies  
Image © 2021 CNES / Airbus

Google Earth



# Lessons from 12 years work

- Digging is a simple approach, and it works
- Late May – early June is the best time.
- A July follow-up is vital.
- Once you begin, others will follow. Having spades etc available for loan is helpful.
- In general, time needed on a site is reduced by 50% each year.
- You have to be happy with what you can actually do. Fighting invasive species on a larger and more organised scale is still far off

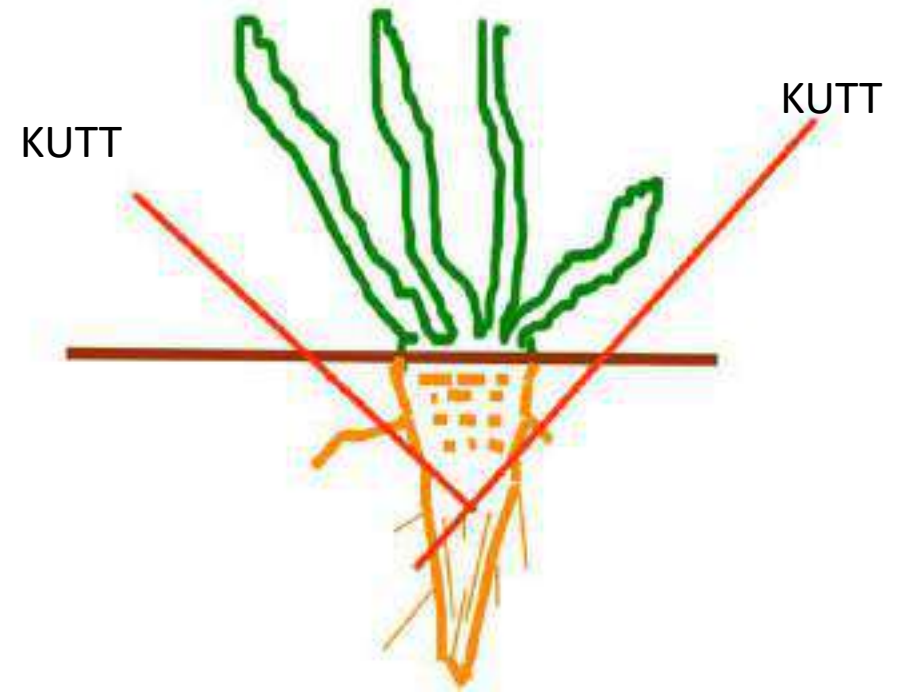
## Hvordan ta knekken på en tromsøpalme

### Med spade

Du trenger en god spade og hansker. Det er lurt å ikke få saft på huden.

Sist i mai er en fin tid. Da er planten passe synlig, men ikke så stor.

1. Grav rundt planten så du er sikker på at alle skudd er med.
2. Grav inn så rota kuttet 15 -20 cm nede, under vekstpunktene. Da vil den ikke sette nye skudd, og rota vil dø. Dette er viktig.
3. Vipp opp og slå av jord.
4. Kutt av grønt og del opp rotklumpen om planten er stor. Legg slik at den tørker ut, eller samle sammen og deponer på godkjent fylling.
5. Gå over etter noen måneder og fjern evt ettervekst.
6. Gjenta noen år. Frø som allerede er i bakken kan spire i opp til 7 år







Thank  
you.