

Bees and bears; the measures to protect bees from damages done by bears



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Latvia, 26 February 2021 (ZOOM meeting)



The Republic of Croatia



Brown Bear Management Plan for The Republic of Croatia



**Ministry of Agriculture, Forestry
and Water Management**
Department for Hunting



Ministry of Culture
Department for Nature Protection

Carnivores that are omnivores



Over 90% plant diet

DAMAGES



Bear damages in Croatia



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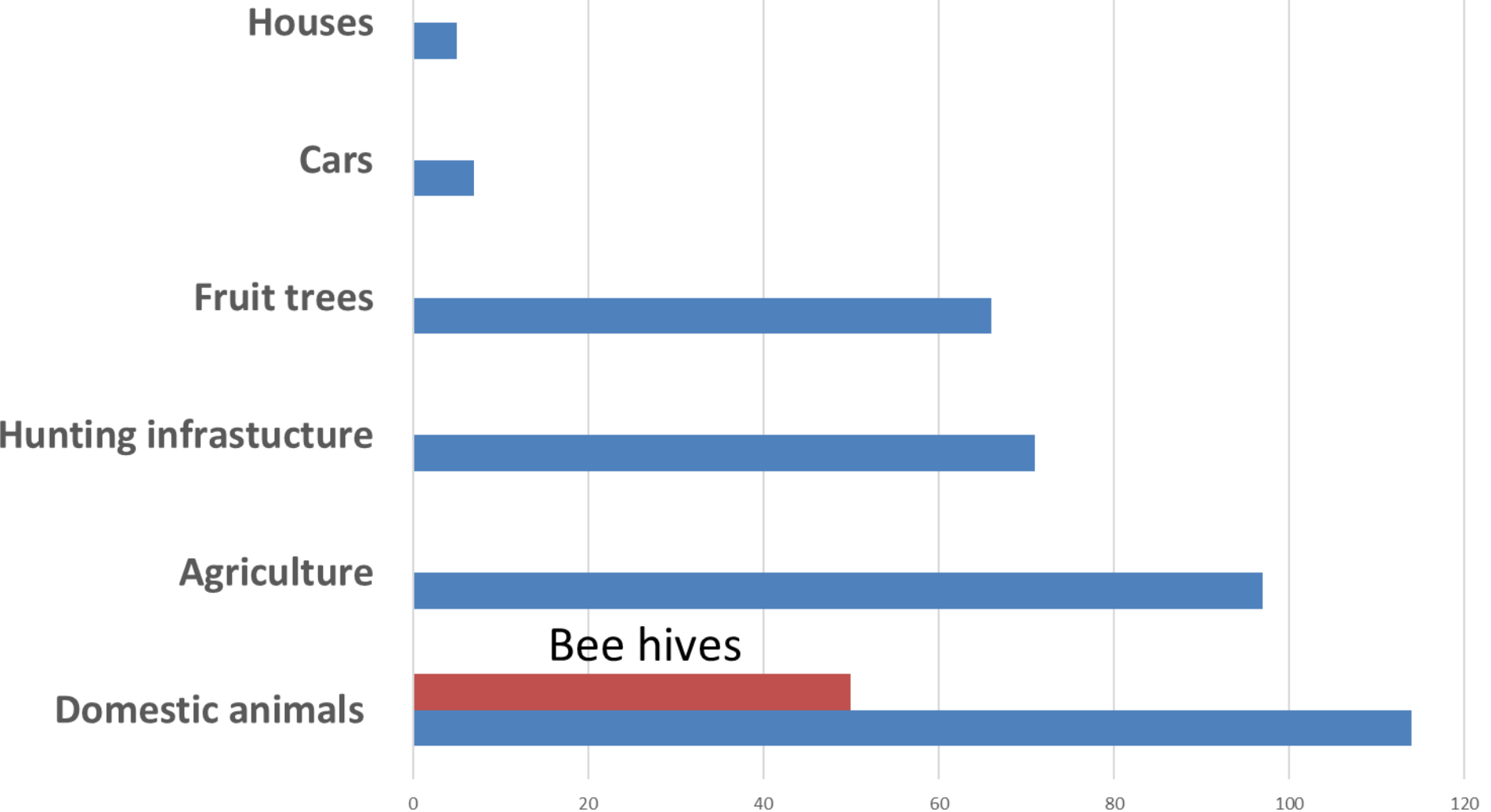
AlarmType:

Bear damages in Croatia 2014-2019

Total = 361 bear damages in 15 years (23 per year)

50 on apiaries (14% of all or 44% among domestic animals)

244 damaged hives (4.9 per attack, range 1- 21)



COST PER BEAR / YEAR (EUR)

(Rank by countries):

- 12666 Norway
- 6114 Pyrenees
- 3445 Appenine (Italy)
- 1605 Cantabrian mountains (Iberian)
- 1371 Alps (Italy)
- 555 Slovenia
- 511 Grece
- 102 Poland
- 45 Bulgaria
- 15 Baltic (Estonia, Latvia)
- 8 Slovakia
- **6.0 CROATIA**
- 3.6 Sweden





BEAR MANAGEMENT PLAN

- GOAL -

Maintenance of stable brown bear population in Croatia at the level that secure the long term survival and coexistence with man.

SPECIFIC GOALS:

1. Habitat preservation
2. Complying with international legislation
3. Avoidance of risks for humans and their property.
4. Determination and maintenance of desired bear population size
5. Economic benefit for local residents through tourism and hunting
6. Raising of public awareness and sharing management decisions with interest groups.



MANAGEMENT PLAN

1. Monitoring and research



2. Garbage access



3. Problem bears



4. Bear emergency team

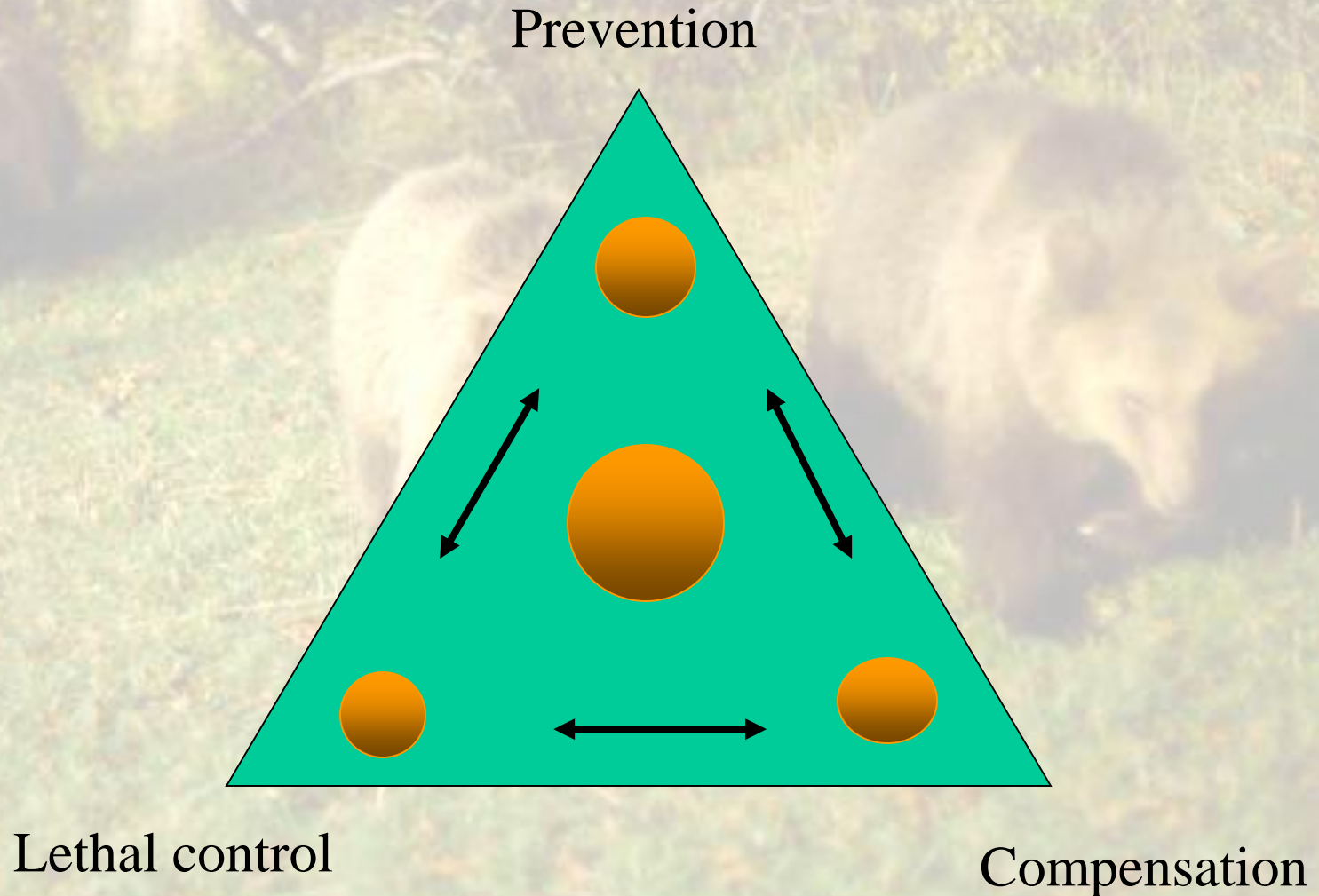


It is important to demonstrate to local people that all unusual events around bears, and especially when there is a problem situation, they are not left alone.

5. Minimizing and compensating damage



Problem of LC damages



















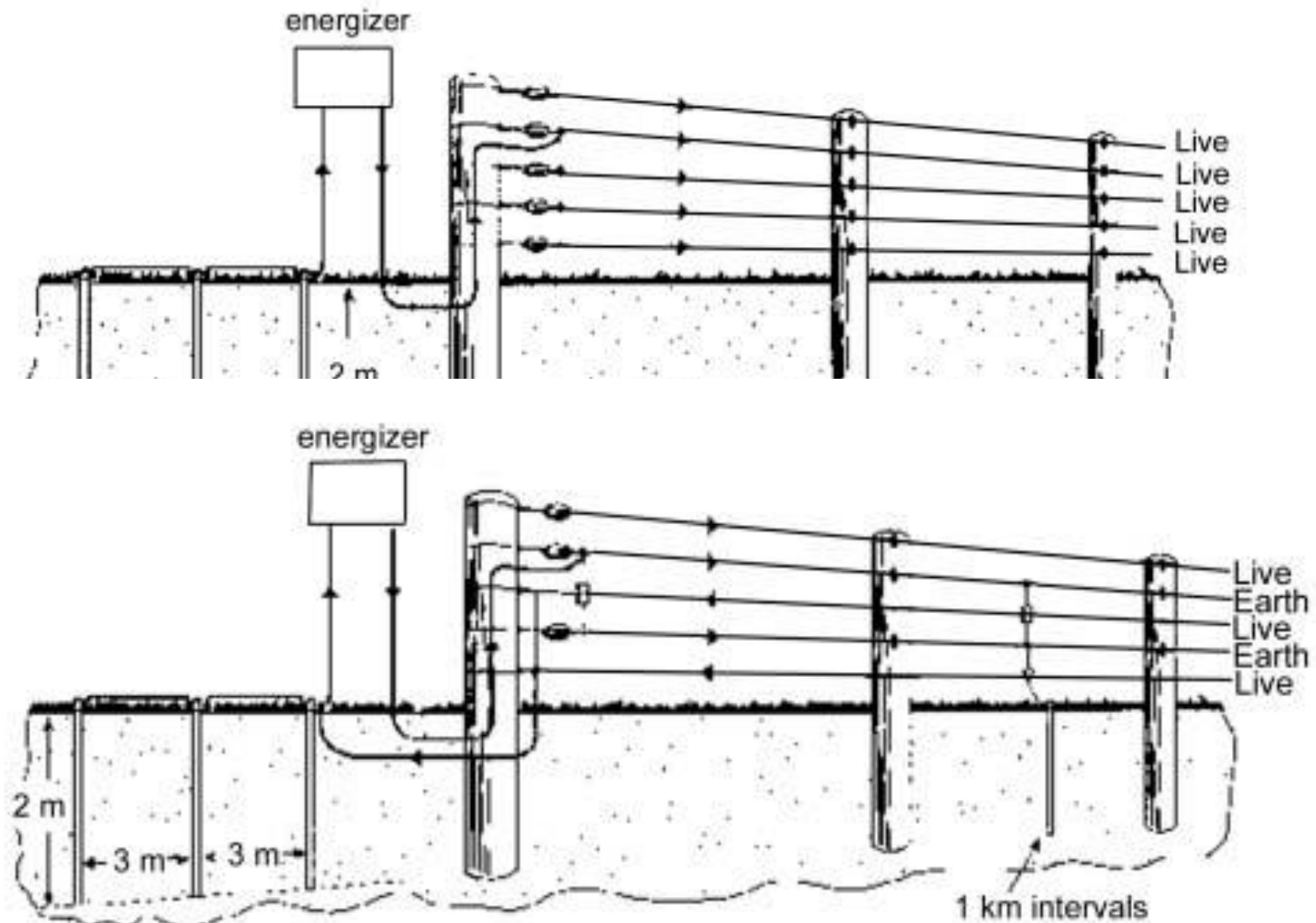


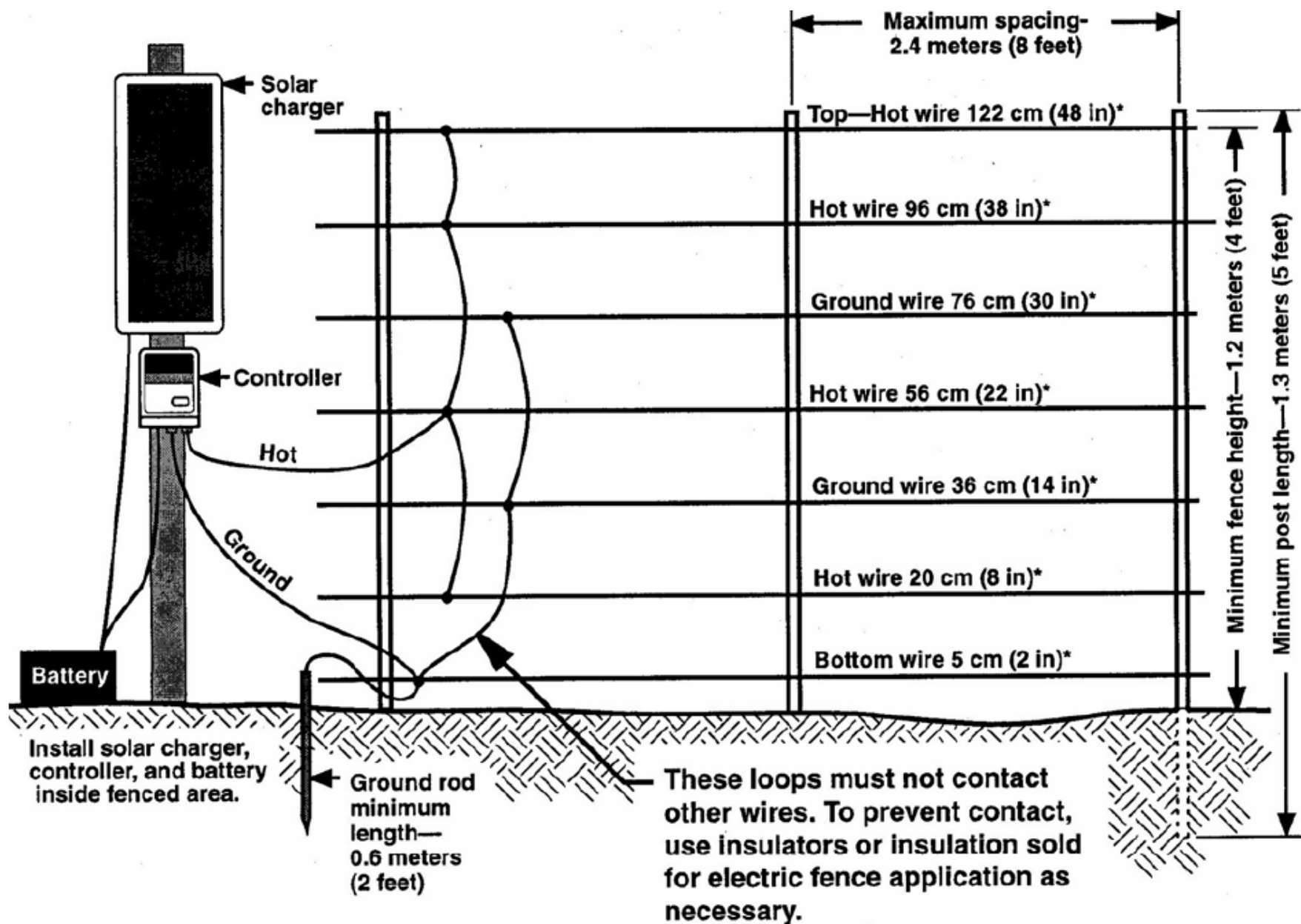




Detering Bears From Bee Yards

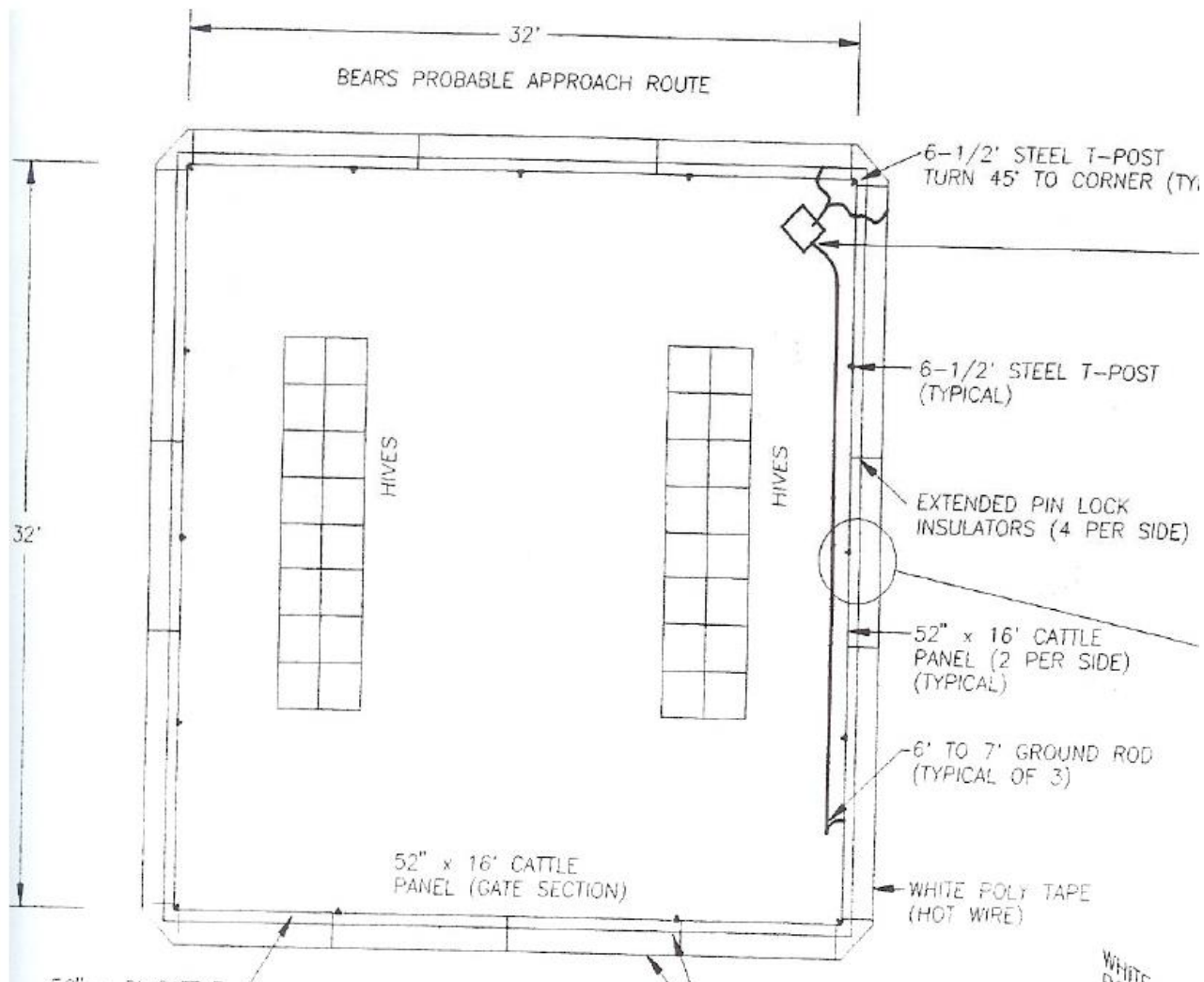
Information Courtesy of Montana Fish, Wildlife & Parks





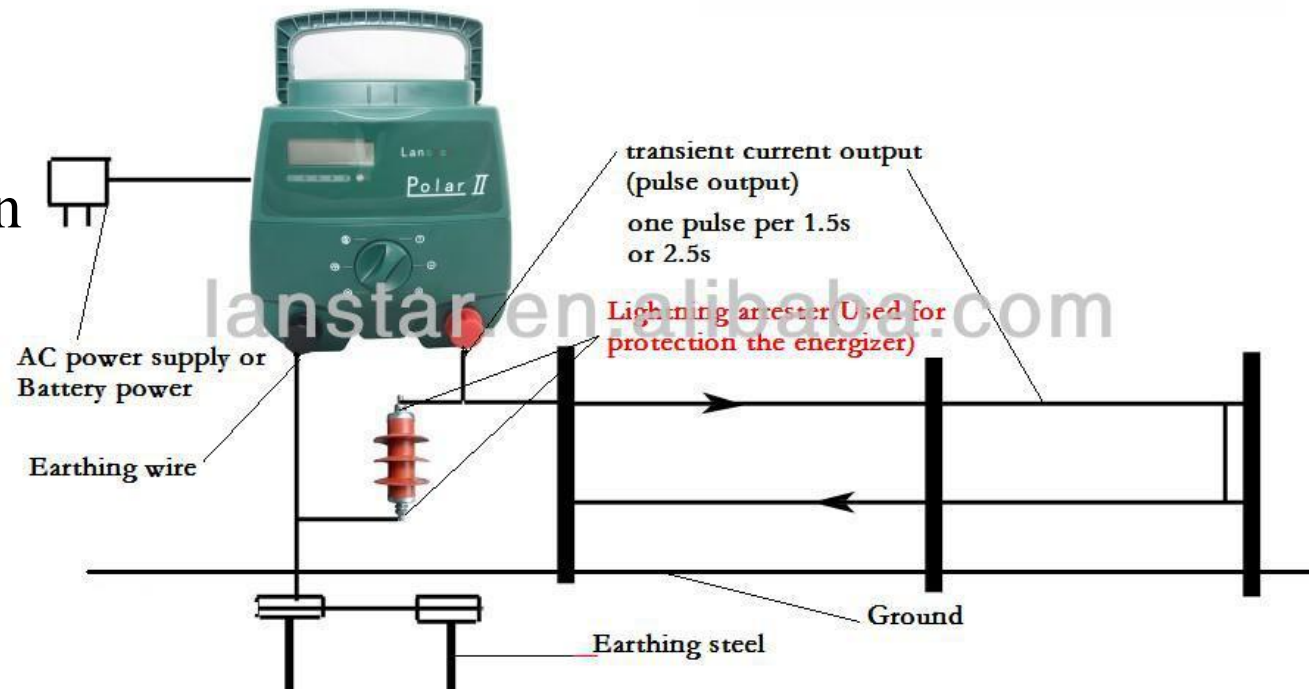
Deterring Bears From Bee Yards

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Equipment needed

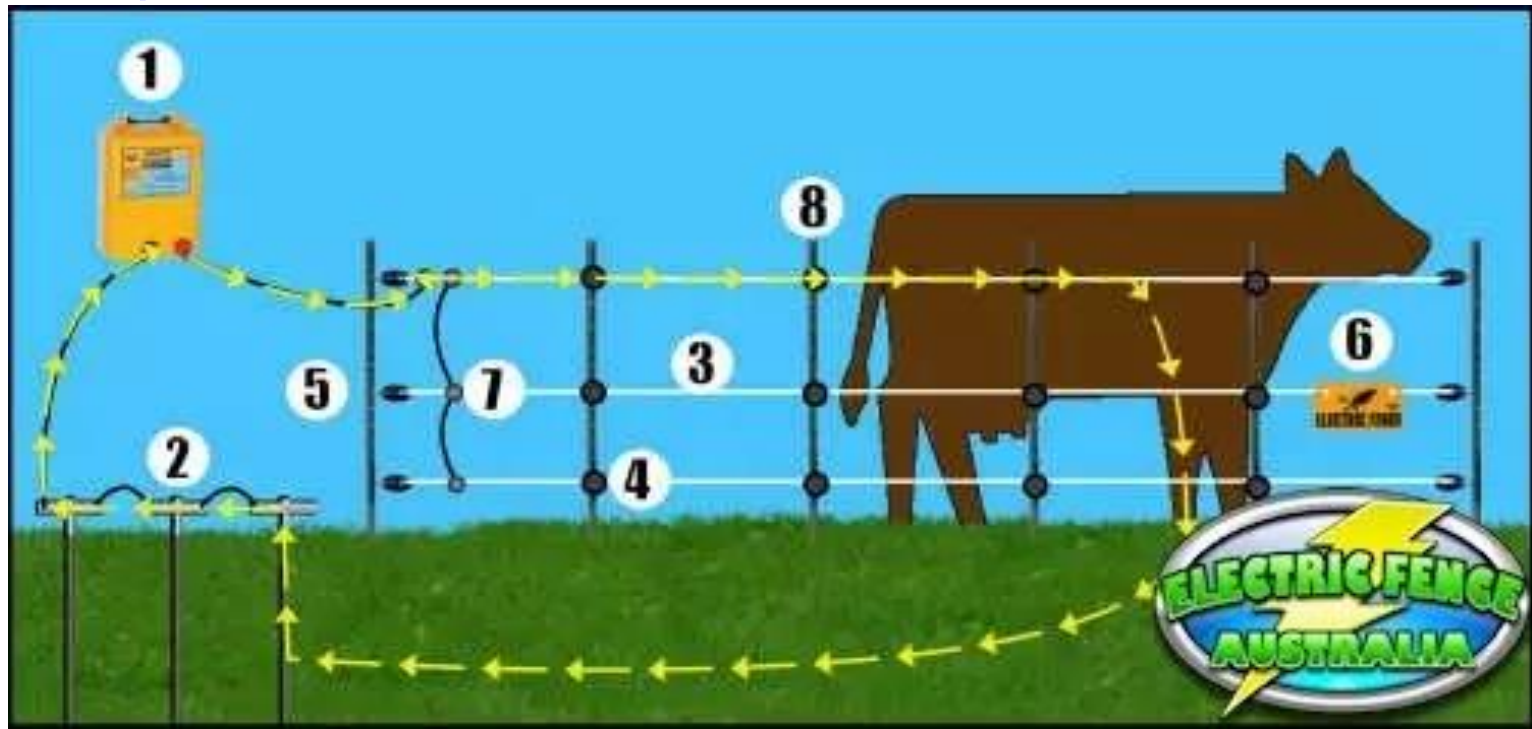
1. Pulse generator (150-250 EUR)
2. Wire (or net) min 6 rows, 1.5 m
3. Isolating connectors
4. Door isolating connectors
5. Fence posts
6. Ground poles
7. Power supply:
 - Car battery
 - Solar pane
 - Direct connection
7. Power tester



• What parts do I need to build a basic electric fence setup?

- 1 - Fence energiser
- 2 - Earth stakes
- 3 - Fence wire or tape
- 4 - Insulators
- 5 - End strainers
- 6 - Fence warning signs
- 7 - Connection bolts
- 8 - Fence posts

6000-10.000 Volt
(safe for people)

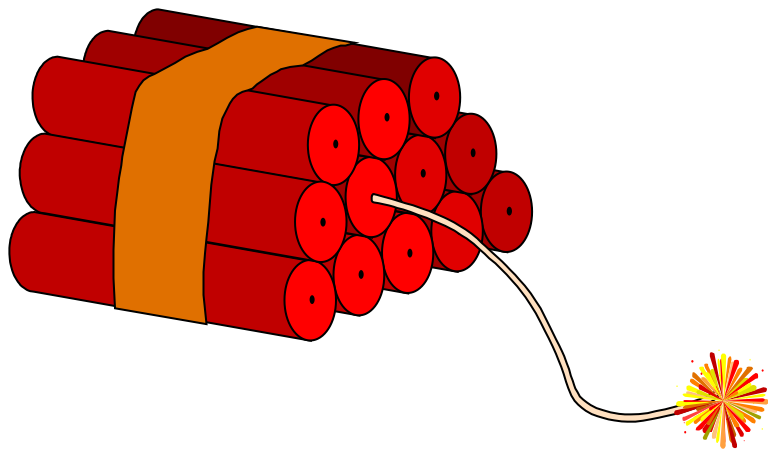
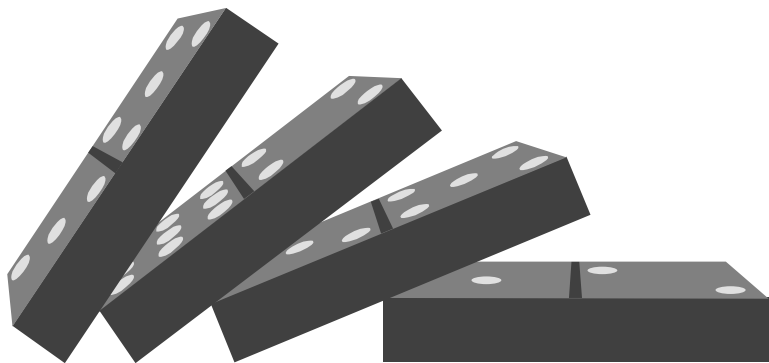
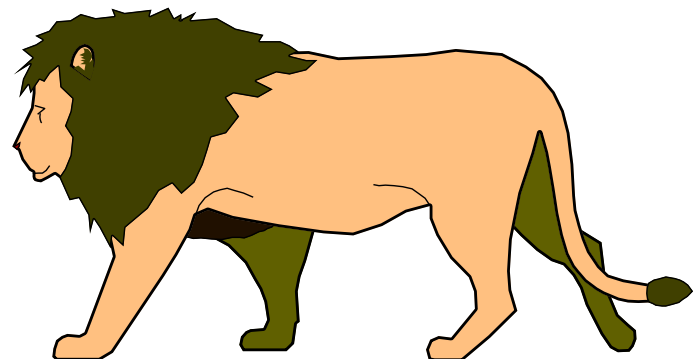
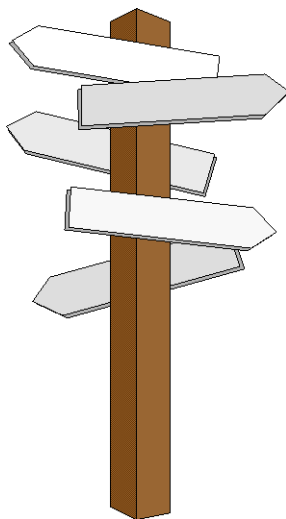
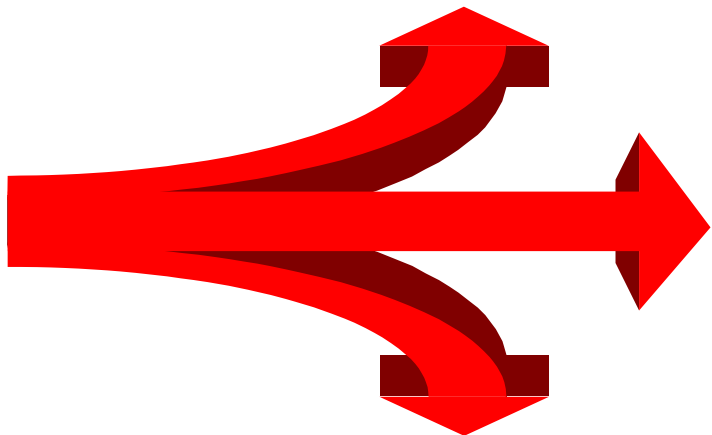
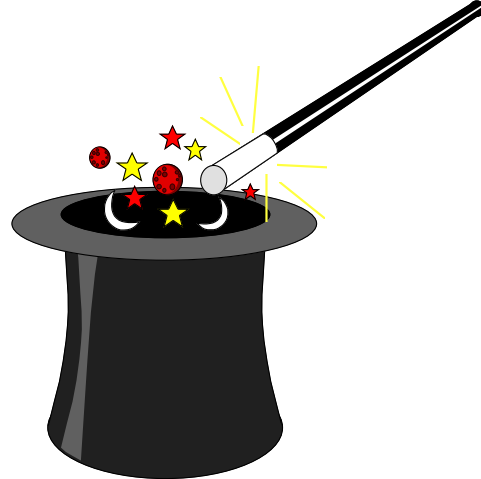
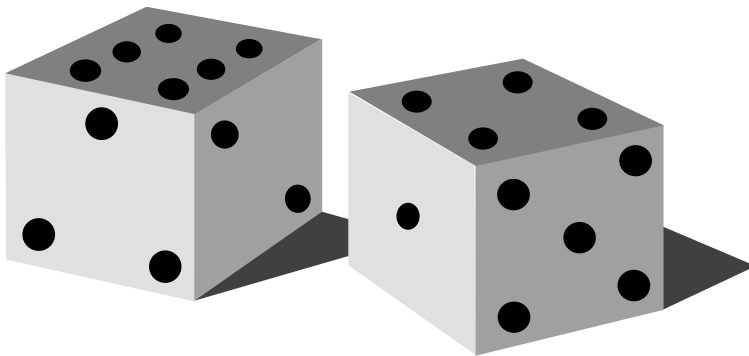
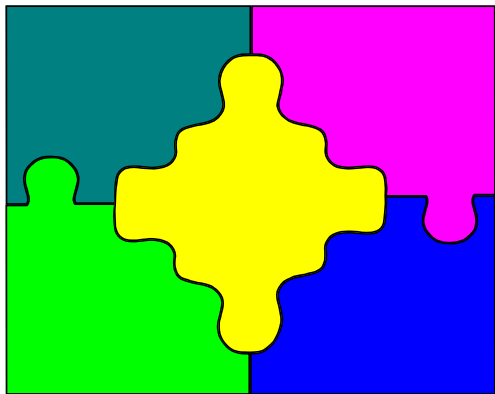


Warnings and power supply













THANK YOU!