Beekeeping in Norway

- 2.800-3.000 beekeepers
- 50.000 colonies
- 1.200 tonnes honey



Hobby- commercial beekeeping

- 1-24 hives = 2300 beekeepers
- 25-99 hives = 400 beekeepers
- 100-199 hives = 70 beekeepers
- More than 200 hives = 30 beekeepers











Honningcentralen A/L

- Owned by 1500 beekeepers
- 750. 000 kg/year
- 4.4 €/kg to producer





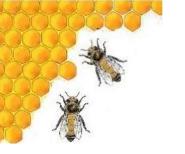
- Subsidy to the beekeepers in case of failure in production. Based on average last 3 years (27% own share)
- Subsidy in case of big losses of beehives (extraordinary winter losses) 185 €/colony



- Subsidy to hire a relief man in case of sickness
- Repaid tax on sugar feed for wintering (Max 20 kg. per colony)
- Tax on imported honey (3€/kg)



- Annual subsidy of 38 €/colony (25-250 colonies)
- Annual income of a beekeeper with 250 hives on average 20.000-25.000 €



Legislation

New regulation for beekeeping in 2009



Registration of apiaries

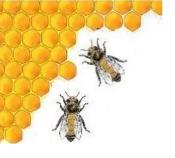
- All beekeepers in the country have a duty to register all their apiaries
- All hives shall bee individually marked
- Every beekeeper shall keep a record of where the hives are located at any time



The bees must be certified before moving them

- Hive inspection for clinical symptoms
 - American foulbrood (*Paenibacillus larvae*)
 - European foulbrood (Melissococcus pluton)
 - Stone brood (Aspergillus flavus/A. fumigatus)
 - Small Hive Beetle (Aethina tumida)
- Laboratory: Varroa and tracheal mite (in the areas where this is necessary)





Varroa destructor Acarapis woodi (buffer zone for Acarapis woodi)





Varroa treatment:

Oxalic acid trickling (3.5 ml 3.2%/comb)

Drone brood removal

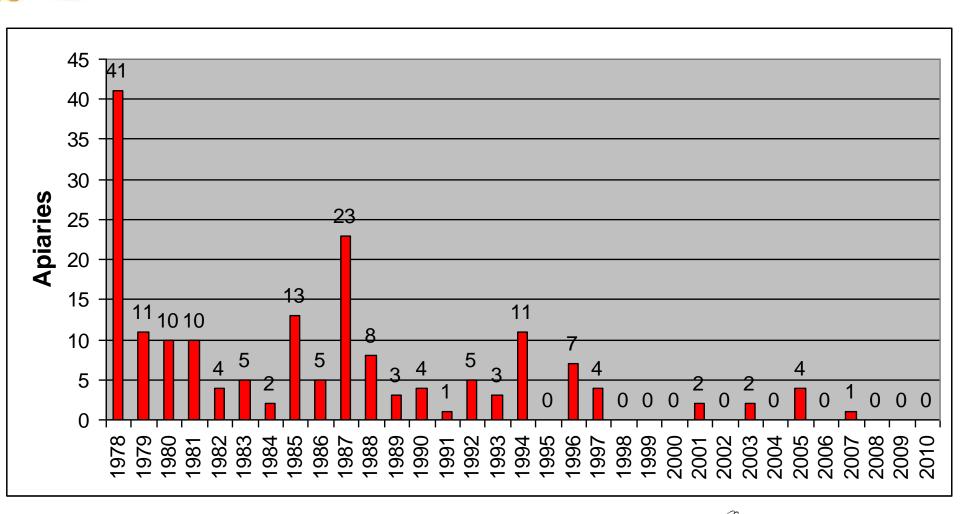
Formic acid

Breeding for Varroa tolerance

Winter losses in Norway

Year	Number of beekeepers	Winter-losses %
1997/1998	634	8,6
1998/1999	711	10,3
2000/2001	569	10,0
2002/2003	490	11,9
2003/2004	405	8,0
2004/2005	359	13,1
2005/2006	387	10,6
2006/2007	324	6,0
2007/2008	481	7,7
2009/2010	148	9,6
		STIFTET 1884

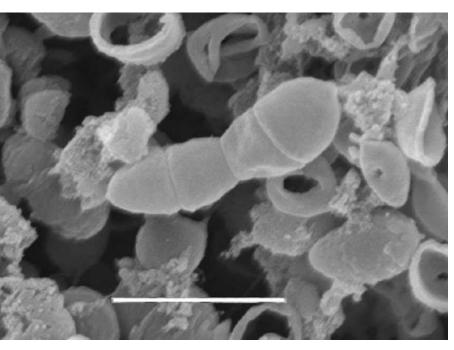
American foulbrood (AFB)

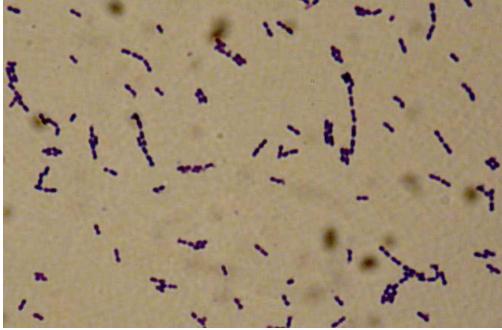






Melissococcus plutonius

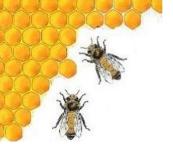






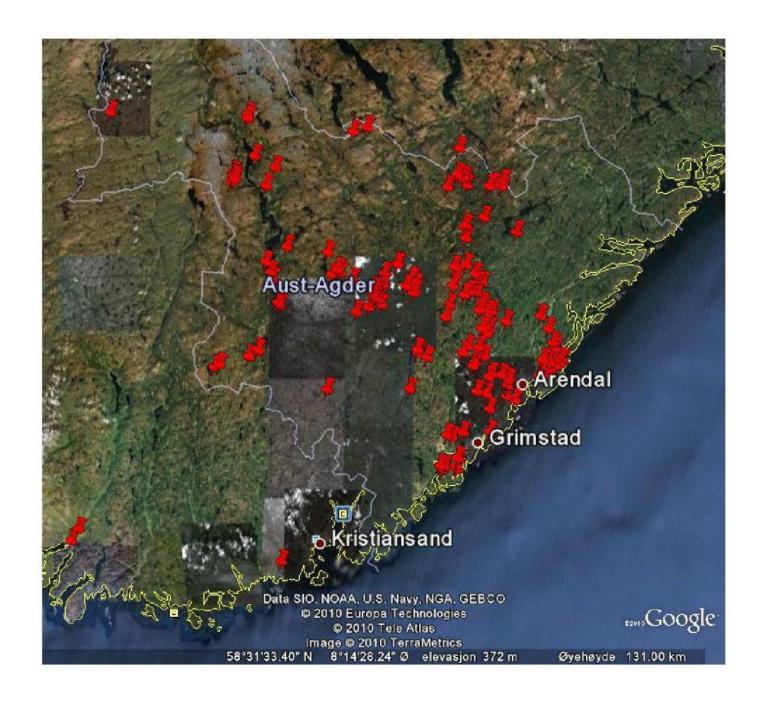


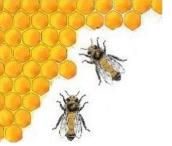




- Policy: Eradication of EFB in Norwegian apiaries
- Level of infection:
 - Colony
 - Apiary
 - Beekeeper operation
- Destruction of all colonies belonging to beekeeper testing positive for EFB in one or more of his/her colonies







Contact apiaries:

- Within 3 km from infected beekeeper operations
- Beekeeper operations that have bought colonies/used equipment from infected beekeeper operations in the period 2008-2010
- Beekeeper operations that have migrated with their colonies to Aust-Agder County in the period 2008-2010



Economical compenzation

- Sanitation due to a public imposition
- 185 €/colony (bees)
- 75% of the cost of new equipment
- 22 €/h spent on sanitation



