



Tree beekeeping in Poland some history



Dr. Przemysław Nawrocki, WWF Poland

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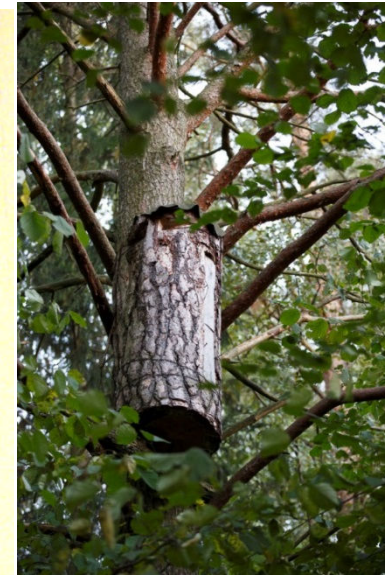
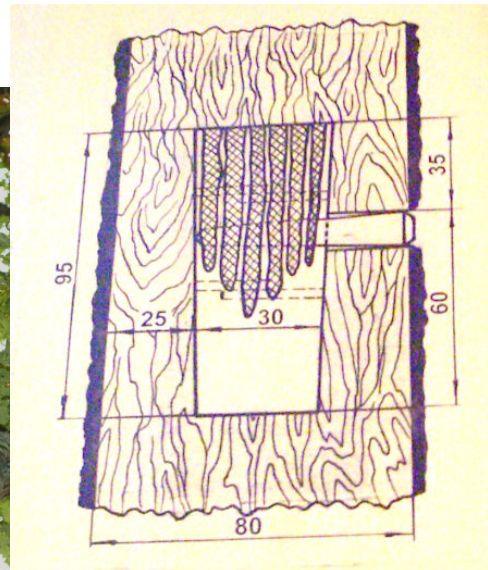
Basic terminology



„Wild bee hive” - bees inhabiting a natural hole



Basic terminology



Tree hive – beute – *barć* - *bort*

Tree hive keeper – *zeidler* – *bartnik* - *bortnik*

Log hive – *klotzbeute* - *kłoda* - *koloda*

(*barć* – *bort*, etc. - names from Polish and Russian language respectively)

Tree (hive) beekeeping - *waldbienenzucht*



The oldest direct evidences of tree beekeeping



- Tree hive from Eastern part of Germany from 1st – 2nd century
- Tomb in Russia from 5th century - complete tree hive keeper's equipment
- Tree hive from Oder River from ca. 10th century





Tree beekeeping in Poland

more than a thousand years-old skill



- **Maximum of development – 16th and 17th century**
- **Important branch of Economy**
 - Wax, honey for local market and for export
 - Profits from wax and honey could be 30 times higher than from wood (data from 1775y, forest in Człuchów area, South-West Pomerania)
- **Tree hives belonged to kings, princes and cities**
- **Tree hive keepers had right for inheritable timeless lease of the tree hives**
- **Trees with hives marked with special signs**



Examples of Polish tree hive signs indicating ownership

Grupa II

— Bór Złotowski Krzysztofa Kuzi (1629)	Bór Kokosiński (1633)	Bór Serkowski Jakuba Śledzia (1674)

Grupa III

— Bór Sobiechowski St. Prusacika (1633)	Bór Nadoliński Kaspra Łysika (1634)	Bór Wiśniakowski Wojciecha Kanatka (1636)

Grupa IV

— Bór Siwiborski Wojciecha Nasiadki (1633)	Bór Kaniowski Mariana Jankowskiego (1634)	Bór braci: Stanisława, Andrzeja i Wawrzyńca Kołodziejów (1672)

Oddzielne miejsce w systematyce znamion zajmuje m. in:

— Bór Kaniowski Anny Łupińskiej (1629)	Bór Stachiwiński Macieja Lejko (1679)	Bór Piekłowski Macieja Serafif- czyka (1676)	Bór Siwiński Macieja Dziekuń- skiego (1676)



Tree hive keepers



- **Diverse social origin (peasants, townsmen, nobles)**
- **Unique, coherent community (brać bartna)**
 - own law (in written form since 16th century)
 - self-government
 - own court
- **Highly respected profession**
- **Some political power, especially in 18th century**



Tree hive keeper's life



- Basic unit managed by 1 tree hive keeper – 60 tree hives („bór bartny”)
- Wealthy tree hive keepers could possess/ lease 300 – 400 tree hives
- Additionally “bee meadow” had to be created and managed
- One honey harvest/ year
 - 3,5 – 10 kg of honey/ year/ hive
 - 21 – 53 kg of honey/ year/ hive Białowieża Forest
- Tribute for the king: honey, wax, hay, pine marten pelts, later money
- Right to use wood, to hunt for birds and small mammals, and to collect acorns
- Threat of tree robbing a tree hive, severe punishment for robbery



Tree hive keeper's life – preparing a tree for future generations





Quantitative data from beginning of 19th century

Polish Congress Kingdom 1827y

(constitutional monarchy with the Emperor of Russia serving as the Polish King)

128.5 thousands km²,

4 million inhabitants



- 70 000 tree hives
- 100 000 log hives in apiaries
- Ca. 1 tree hive/ 2 km²
- Ca. 1 tree hive / 1 km² of forested area
- Ca. 1 bee colony / 30 inhabitants

Amount of tree and log hives - after Blank-Weissberg S. 1937. *Barcie i kłody w Polsce* and Wróblewski R. 1991. *Polskie pszczelarstwo*.



Selection of tree species for tree hives

Forest district Samsonów, Świętokrzyska Forest
(central Poland) 1832y

Tree species	No of trees with hives	%
pine	154	51,7
larch	91	30,5
oak	24	8,1
fir	22	7,4
spruce	7	2,3
Total	298	100,0

Why beech trees are missing on the list?



After Barański S. 1979. *Dzieje bartnictwa w Puszczy Świętokrzyskiej w zarysie.*



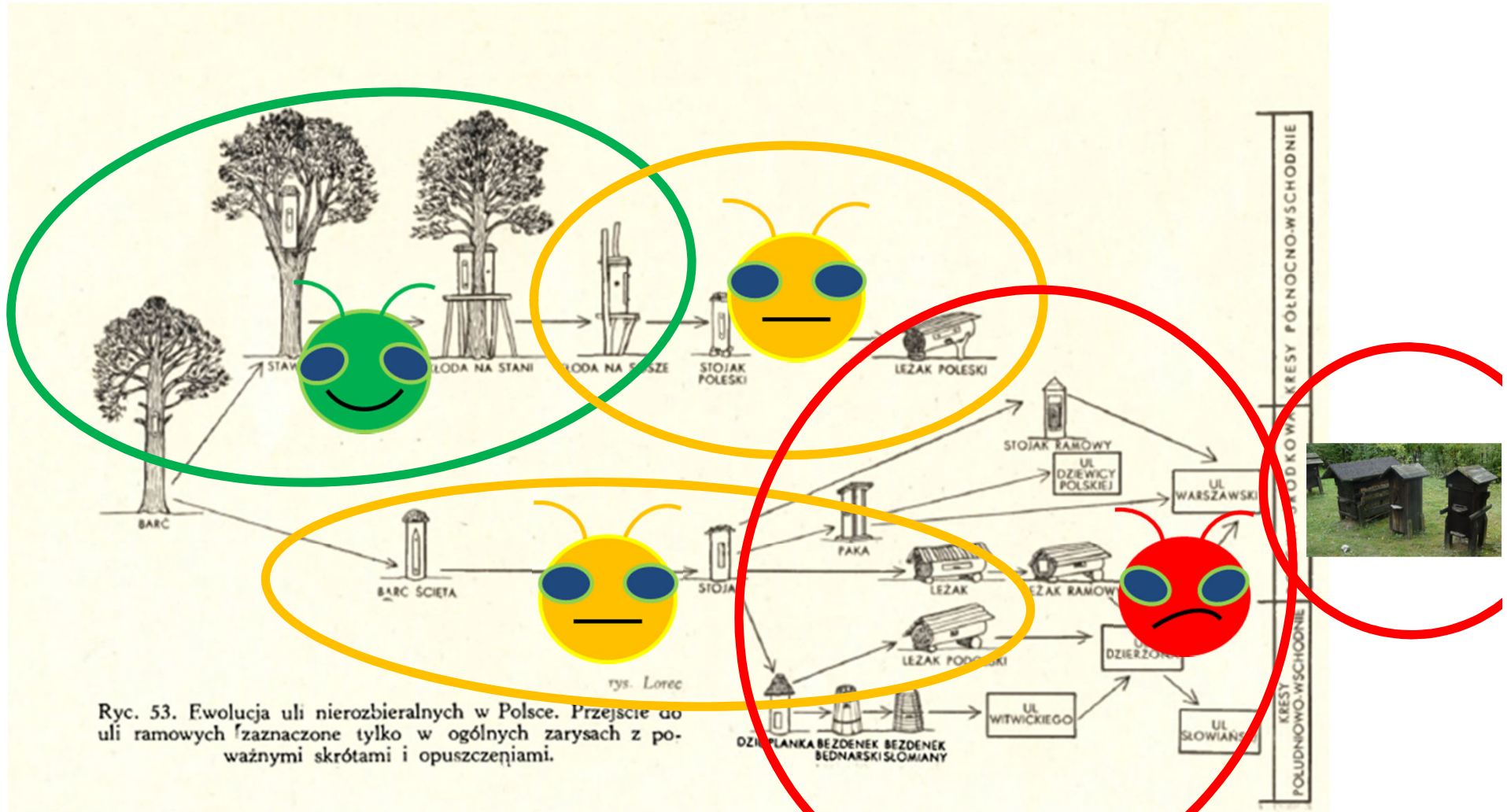
Transition to modern beekeeping



- Replacement by apiary beekeeping started since at least 13th century
- Extinction of tree beekeeping – half to the end of 19th century (legal ban by rulers of Austria, Prussia and Russia)



Transition to modern beekeeping



Based on illustration from Blank-Weissberg S., 1937.
Barcie i kłody w Polsce



Extinction of wild bees in Poland

2nd half of 20th century, caused mostly by varroa

The genetic lines in apiaries closest to “Black Bee” *Apis m. mellifera*

- „Northern” (vicinity of Olecko)
- Augustowska (Augustowska Forest)
- Kampinoska (Kampinoska Forest)
- Asta (vicinity of Radomsko)





The last of tree hive beekeeping tradition in Poland

- Open air museum specimens
- Written records (archives)
- Scientific publications and a film from 1938y documenting equipment and skills of the last tree hive keepers
- Beekeepers vocabulary with some relict words
- Tradition of catching swarms with log traps



- Presence in “people’s minds and hearts”



The last of tree hive beekeeping tradition in Poland

- Presence in “people’s minds and hearts” – bees and hungry bears





Tree hive beekeeping tradition west of Poland

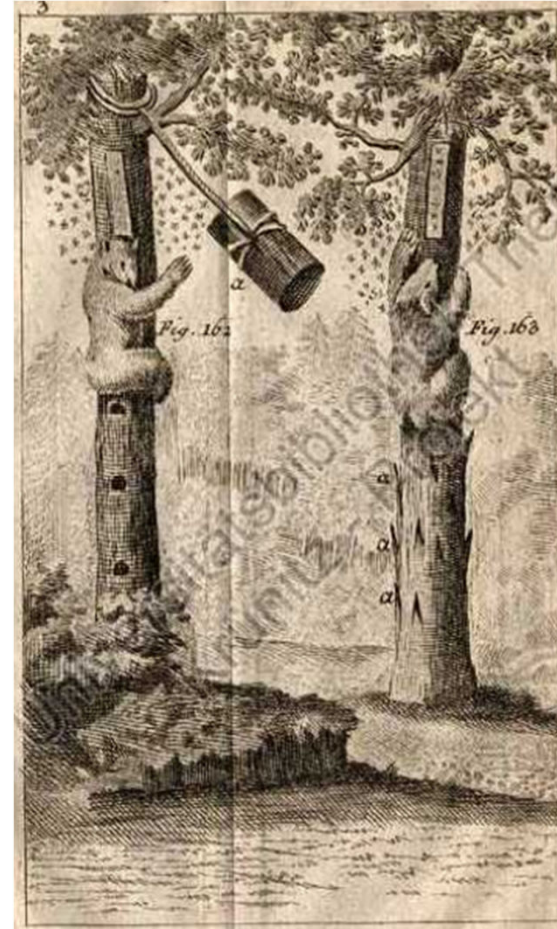
- Rich tradition in Germany
- Vanished by the end of 19th century



Feucht



Tree hive beekeeping tradition west of Poland





Tree beekeeping east of Poland

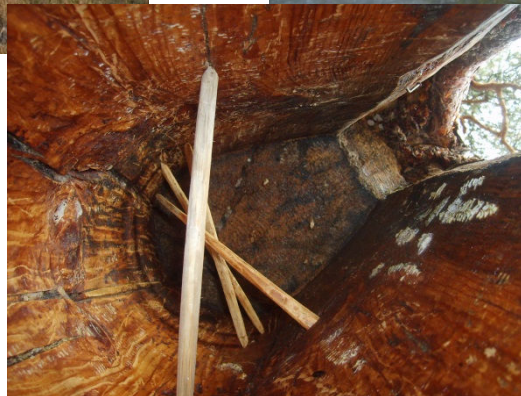
- Belarus and Ukraine – log hives (called bort) are still in use
- The skills are vanishing





Tree beekeeping east of Poland

- **Bashkortostan, southern Ural – tree hive beekeeping survived as an alive tradition**





Unique opportunity to restore the tradition in Poland and the rest of Europe



Thank you for your attention