

# Animal welfare in hatchery

## Conference of the Hungarian Turkey Association

13.11.2023 – Budapest

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# Veranda for turkeys





# Platforms for turkeys









# Private farming of turkeys popular





## Einstallungsübersicht Putenküken in Europa in Mio. Stück

	2015	2016	2017	2018	2019	2020	2021	2022e	in %	22 zu 21	22 zu 19
Polen	41,3	42,9	46,2	47,6	51,2	46,0	42,4	41,0	22,8%	-3,36%	-19,85%
Deutschland	30,7	30,6	29,0	28,1	28,3	27,2	26,2	25,0	13,9%	-4,58%	-11,66%
Frankreich	49,0	47,0	45,0	43,0	40,0	39,0	27,1	25,0	16,7%	-17,13%	-25,00%
Italien	30,0	30,0	30,0	30,0	30,0	29,0	27,1	25,0	12,8%	-15,13%	-23,33%
Spanien	21,0	22,0	24,0	28,0	30,0	27,0	27,0	29,0	16,1%	7,41%	-3,33%
UK	16,0	15,6	14,5	15,4	15,2	14,4	15,2	15,0	8,3%	-1,06%	-1,25%
Ungarn	8,0	8,0	8,0	7,5	7,5	7,0	7,7	6,0	3,3%	-22,08%	-20,00%
Österreich	1,8	1,8	1,9	1,8	1,6	1,8	2,0	2,1	1,2%	3,02%	29,98%
Slowenien	0,7	0,6	0,6	0,6	0,6	0,6	0,5	0,5	0,3%	-4,41%	-11,84%
Andere	10,0	10,0	10,0	10,0	10,0	10,0	9,0	8,5	4,7%	-5,56%	-15,00%
<b>Gesamt</b>	<b>208,4</b>	<b>208,5</b>	<b>209,3</b>	<b>211,9</b>	<b>214,3</b>	<b>201,9</b>	<b>193,3</b>	<b>180,1</b>	<b>100,0%</b>	<b>-6,85%</b>	<b>-15,97%</b>

### Russland & USA

Russland	16,0	20,0	23,0	24,0	24,0	29,0	35,0	40,0		14,29%	66,67%
US	257,9	271,5	269,7	266,1	261,2	250,6	254,0	250,0		-1,57%	-4,29%

# Comparison of stocking density

Länder	Grenze in kg	Seit	Praxis in kg
<b>Standardproduktion</b>			
Schweiz	36,5		36,5
Österreich	40	2001	40
Deutschland	58 / 52	1998	58 / 52
Italien	keine		60
Polen	keine		50 - 65
Russland	keine		70
Frankreich	keine		75
<b>Tierwohlprogramme</b>			
Niederlande - Better Leven **	35	ca. 2015	35
Niederlande - Better Leven *	36 / 40	ca. 2015	36 / 40
Österreich - Tierwohl verbessert	38,5	2018	38,5
Deutschland ITW	53 / 48		53 / 48

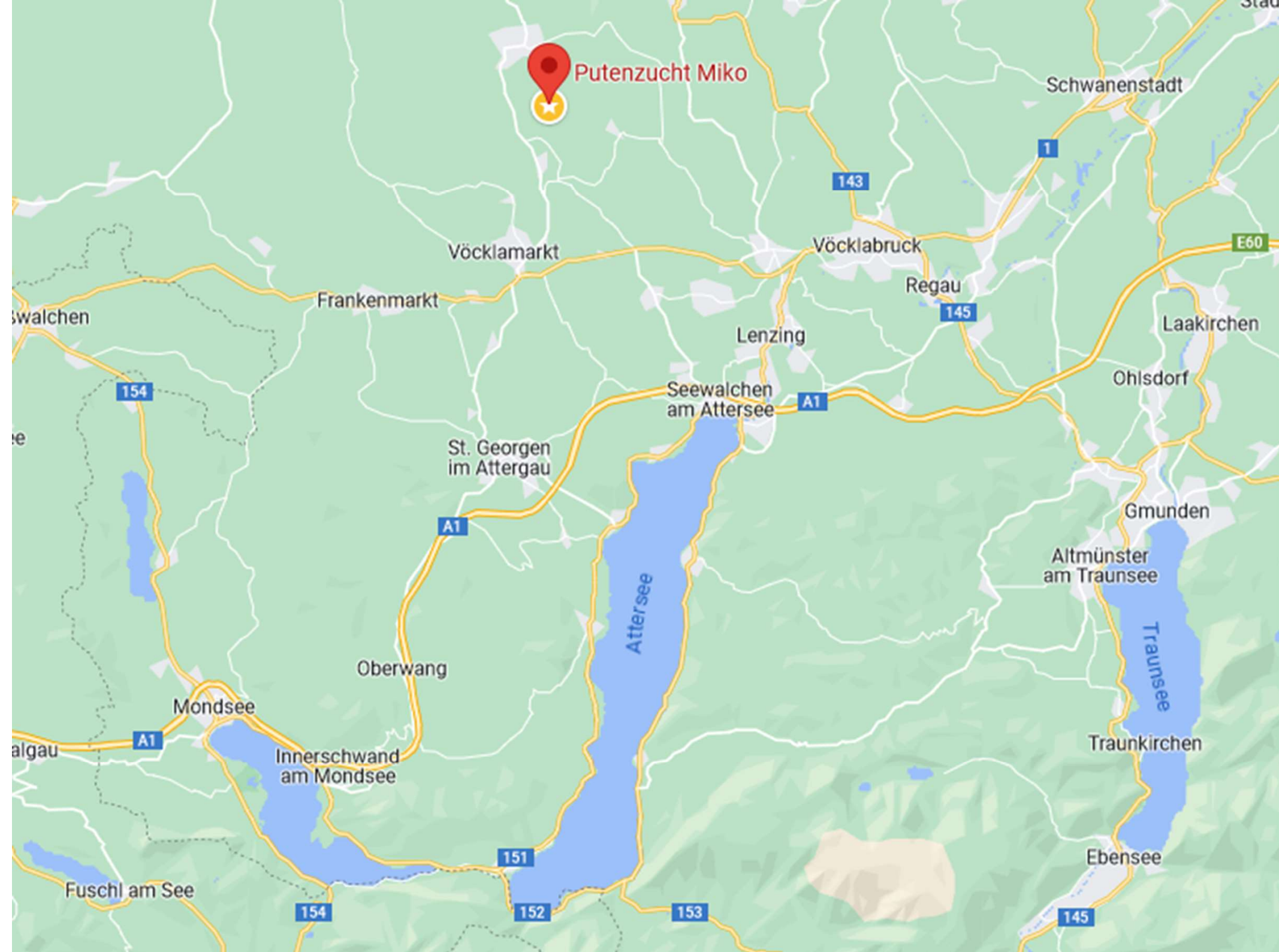




# Only turkey hatchery in Austria







# Alone – far away from poultry





# Hatchery modernisation



# High biosecurity standard





# 2022 – Hatchery modernisation

Focus on

- Biosecurity
- Workflow improvements
- Optimum poult quality



# Incubators





# Transfer to hatching part



# Poults at hatch





# Vital poultts hatching



# Cloaka sexing







# Storing room





# Fully climated trucks



# Transports up to 60 hours possible





# Welfare aspects in a hatchery

- Welfare aspects before set or transfer
- Welfare at embryo level
- Welfare at after hatch level
- Welfare at transport

# Welfare before set or transfer

- Design of the hatchery
- Keeping out any contamination
- Training of staff





# Welfare aspects at embryo level

- In full interest of the hatchery to provide best conditions for embryos.



- Not in focus of animal welfare people like in layer production.
- Big topic when culling whole batches close to hatch time.

# Welfare aspects at embryo level

<b>Week 1</b>	 Day 1 Embryonic disc appears as a white, lacy circle. Approximate size 5-5mm.	 Day 2 Disc continues to grow. Approximate size 20mm.	 Day 3 A web of blood vessels appears. Heart starts to beat.	 Day 4 Beating heart can be easily seen.	 Day 5 Eye can be seen. Head begins to grow.	 Day 6 Pupil can be seen. Head continues to grow.	 Day 7 Head is very large-half embryo's total length. Main joints of legs/wings forming.
<b>Week 2</b>	 Day 8 Limb buds can be seen.	 Day 9 Pipping tooth begins to form. Limb buds continue to grow.	 Day 10 Pipping tooth can be seen.	 Day 11 Pores begin to develop. Beak can be seen.	 Day 12 Pores can be seen. Toes begin to form.	 Day 13 Feather follicles appear on the head. Embryo transforms into a bird.	 Day 14 Feather follicles cover the body. Snood can be seen.
<b>Week 3</b>	 Day 15 Scales and claws begin to form. Rapid growth is evident.	 Day 16 Down begins to grow on the body. Claws can be seen.	 Day 17 Down can be noticed on the head.	 Day 18 Down continues to grow.	 Day 19 Down covers half of the embryo.	 Day 20 Embryo completely covered with down.	 Day 21 Development is complete and poult enters final growth stage.
<b>Week 4</b>	 Day 22 Growing.	 Day 23 Growing.	 Day 24 Growing.	 Day 25 Poult begins to turn and absorb yolk sac in preparation for hatching.	 Day 26 Turning is complete. Yolk continues to be absorbed. Pipping starts.	 Day 27 Yolk is completely absorbed. Hatching begins.	 Day 28 Hatching is complete.
<b>Hatch Window</b>	    						



# Welfare aspects at transport

Important time in the production chain.

Poults and drivers „released“ to „wild“ environment.

Standard procedure under control (T, H, CO2)

Lot`s what potentially can go wrong.

- breakdown of truck, accident, traffic jams, driver`s health problem, unawareness, weather, problems at checkpoints (borders, police), crime at parking places. Flights...

Drivers alone, team can help only from remote

# Welfare aspects after hatch

- From pull of poult until truck departs
- Climate in hatchery (T, H, O<sub>2</sub>, CO<sub>2</sub>)
- Handling of poult
- Awareness of staff
- Euthanasia of nonviable poult
- Mutilations (biggest focus of NGOs)



# Climate in hatchery

- Every poult is a little „heater“. Therefore challenging to climate rooms
- Air flow between boxes or trays



# Constant temperature control

- Most import is the  
**BODY TEMPERATURE**
- Optimum: 39,5 – 40,5 °C
- Higher or lower:  
Heat stress – poult starts to pile, results in a lack of oxygen





# Handling of poult

- Big differences between single persons visible.
- Some persons unsuitable to work in a hatchery

# Awareness of staff

- Everybody in the team should have the same responsibility when it comes to welfare questions



# Euthanasia of nonviable poult

- CO2 stunning and killing by changing concentration of CO2
- Fast rotating knives: quickest for poult, not nice for watching
- Some areas: ban of killing healthy poult

Why would you kill healthy poult?

# Potential mutilations in hatchery

- Beak treatment
- Toe trimming
- De-snooding
- De-spurring



# Long-term method „BioBeaker“



# PSP – Poultry Service Processor

- Blood free method to trim upper beak
- Different settings possible
- Upper beak should not be longer than lower beak



# Difference of intensity visible



3 Days

14 Days

42 Days

32



28



25



No BT





Without beak treatment or not strong enough



# Upper and lower part at one level





„As little as possible,  
as much as necessary“



# Middle intensity





# Middle intensity





# What we don't want to see



Aggressive birds should not create pains  
for others





# Excessive treatment without any advantage



# Excessive treatment without any advantage





# Toe Treatment

## Toe Treatment – Microwave Claw Processor




To



- Detoeing



 farmsanctuary.org





# Mutilations in focus of NGOs

- Distinguish between Beak trimming (beak treatment) and other mutilations
- **Beak trimming** (in the view of welfare NGOs):  
„Painful amputation of the beak performed to prevent injurious pecking (IP). Alternative ways to prevent IP should be sought (e.g. UV lighting, additional enrichment, visual barriers)“
- **Other Mutilations** (in the view of welfare NGOs):  
„Painful procedures that can be easily avoided and therefore should be prohibited. Toe-trimming, De-snooding, De-spurring.“



# Summary

- Lot of welfare issues in hatchery which are not in light of NGOs but are still important.
- Mutilations by far the most in focus
- Beak treatment: „Yes / No“ questions should be „opened“ to the question „as much as necessary, as little as possible“
- Toe trimming, De-snooding, De-spurring: industry should find a position.



Danke für Ihre  
Aufmerksamkeit!!



ISO 9001

HACCP

Putenzucht MIKO