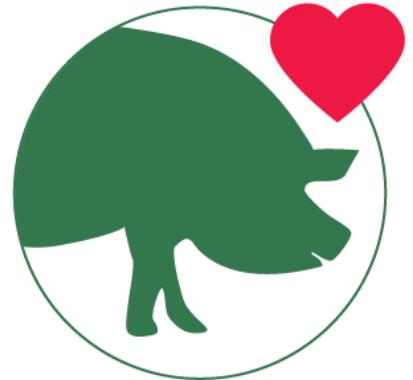


Focus on sow survival

Pig Congress 2021

Pig advisor Nikolaj Stidsen, velas &
Chef Scientist Lisbeth Ulrich Hansen, SEGES Gris

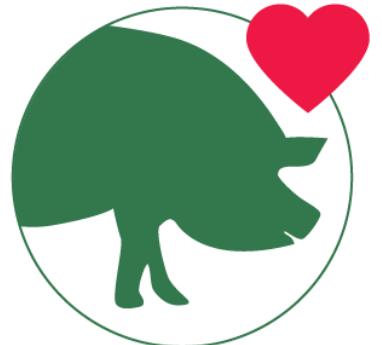


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STØTTET AF
Svineafgiftsfonden





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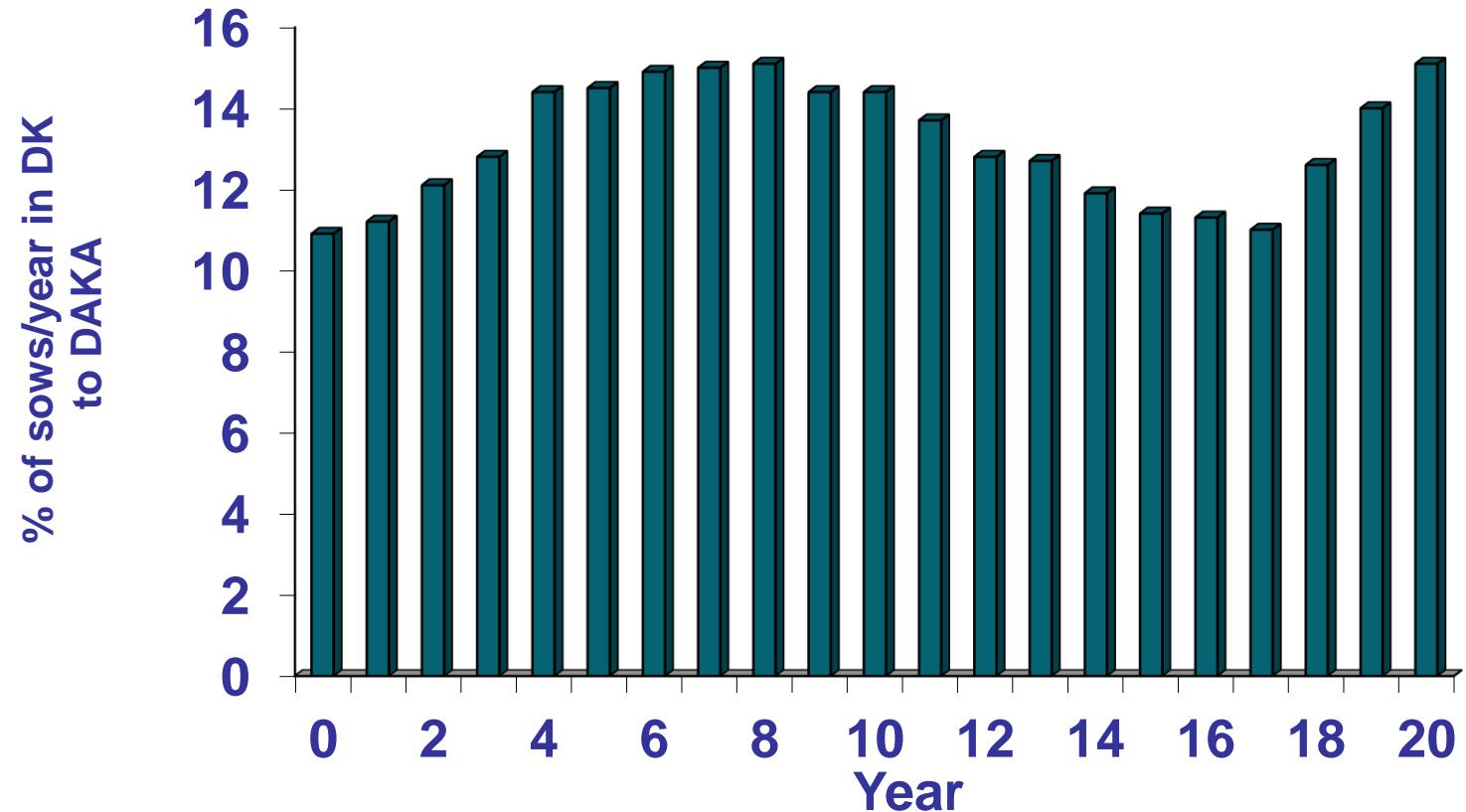
Increased sow
survival rate
– focus on sow
mortality



Development in sow mortality 2000-2020



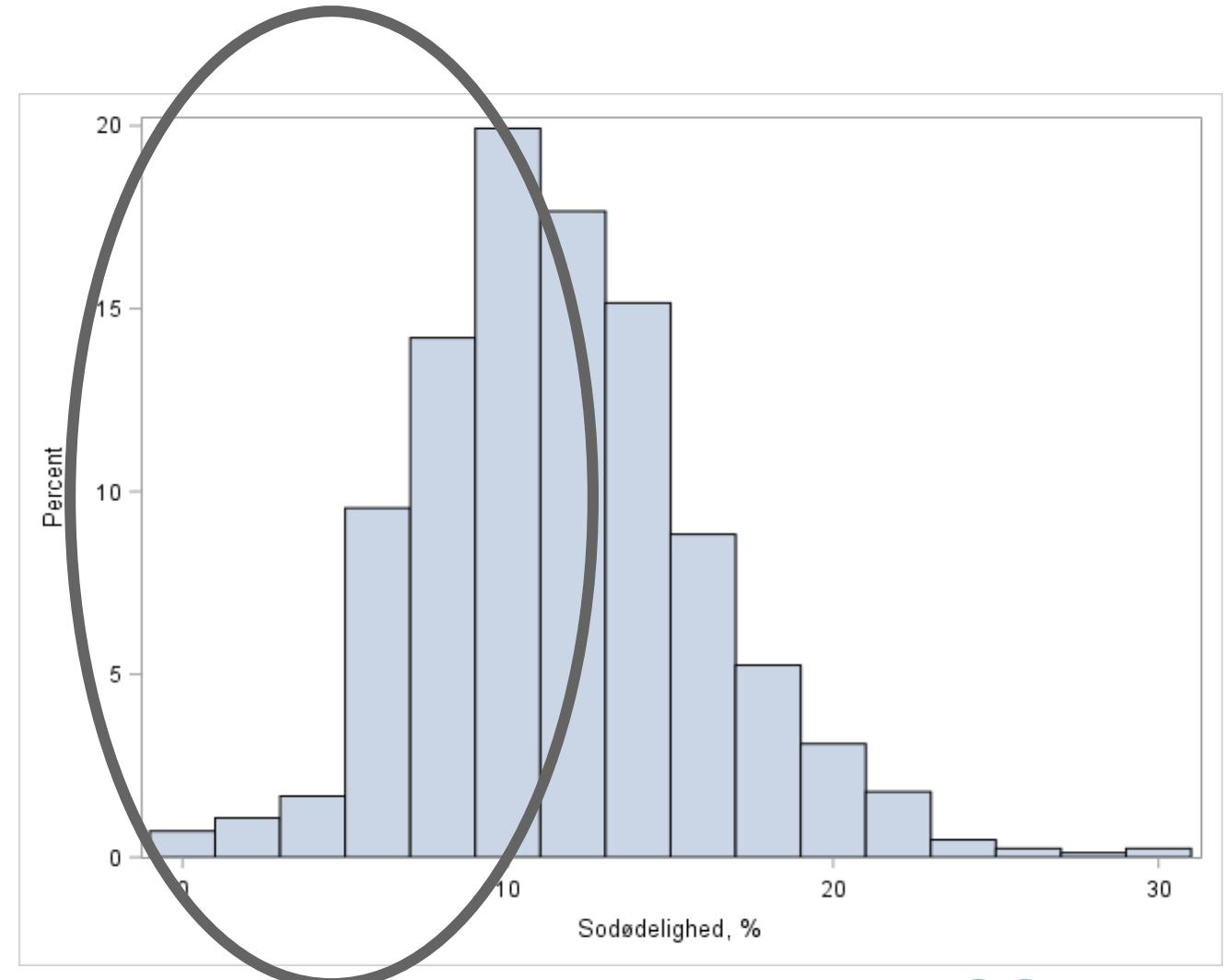
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- Licence to produce – improved job satisfaction – improved economy
- Industry aim of 9% dead/euthanized sows of sows/year
- Need for an increased effort on most farms

Analysis of production herds

- All farms receive DAKA letter – use it actively to monitor development in your herd
- Analysis of approx. 840 herds
- Many have come a long way, but on a lot of farms a dedicated effort is still necessary



Correlation between feeding principle and sow mortality

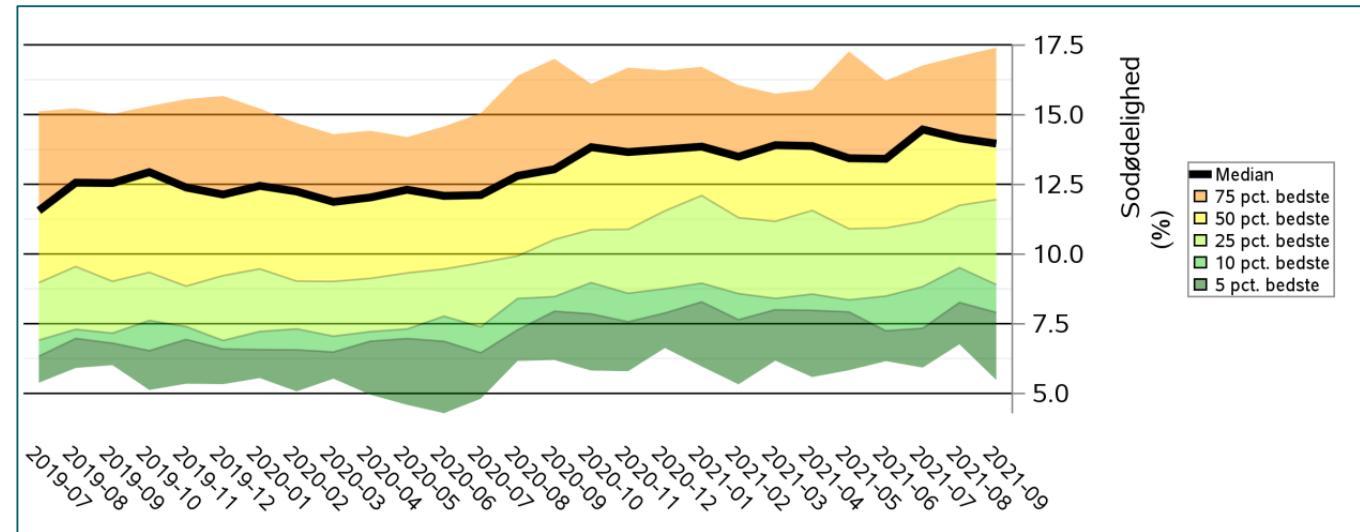
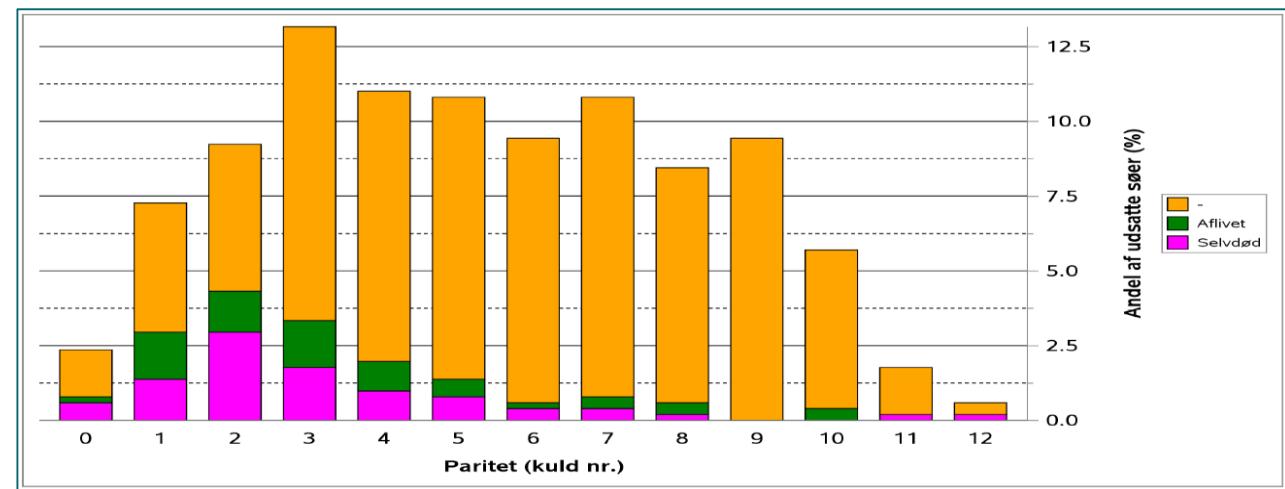
System drægtighedsstald	Antal besætninger	Gennemsnit af % døde sører	Minimum af % døde sører	Maksimum af % døde sører
Free access stalls	59	9,0	3,0	19,0
Floor feeding/long trough	106	10,5	3,0	22,0
ESF – dynamic groups	34	13,3	8,0	20,0
ESF – stabile groups	17	9,8	4,7	15,7

216



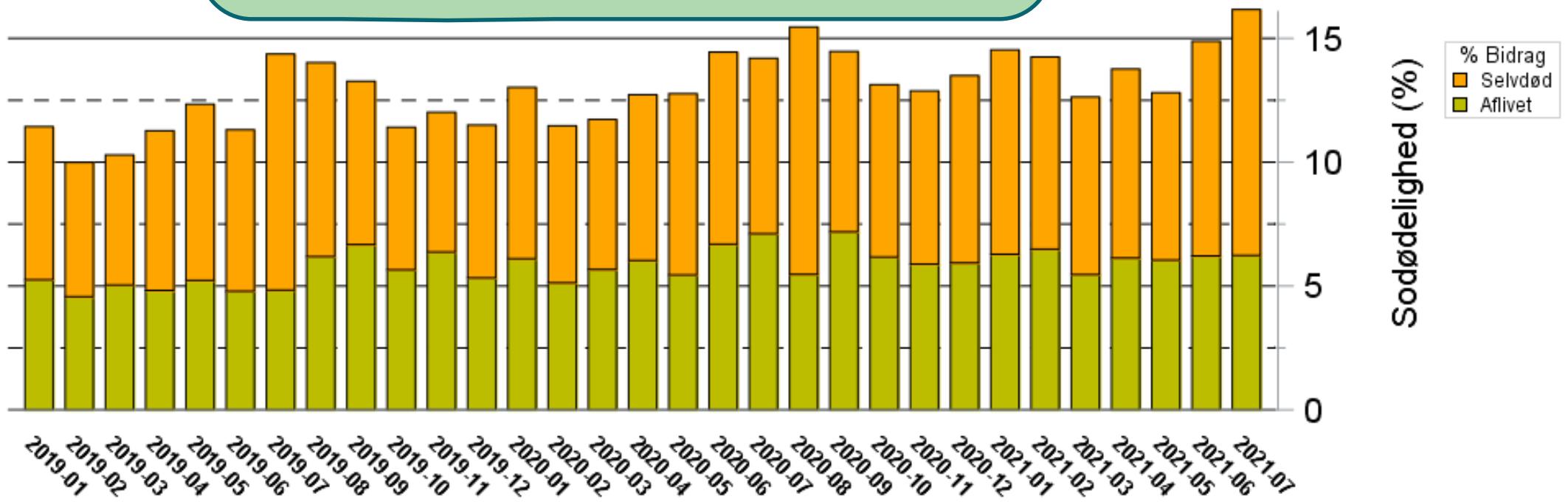
Improved insight at herd level with new SEGES tool

- Use information from your own herd
 - Parity
 - Time in cycle
 - Dead – euthanized
 - Diagnosis
- Benchmarking
 - Approx. 70,000 sows included in SEGES analyses



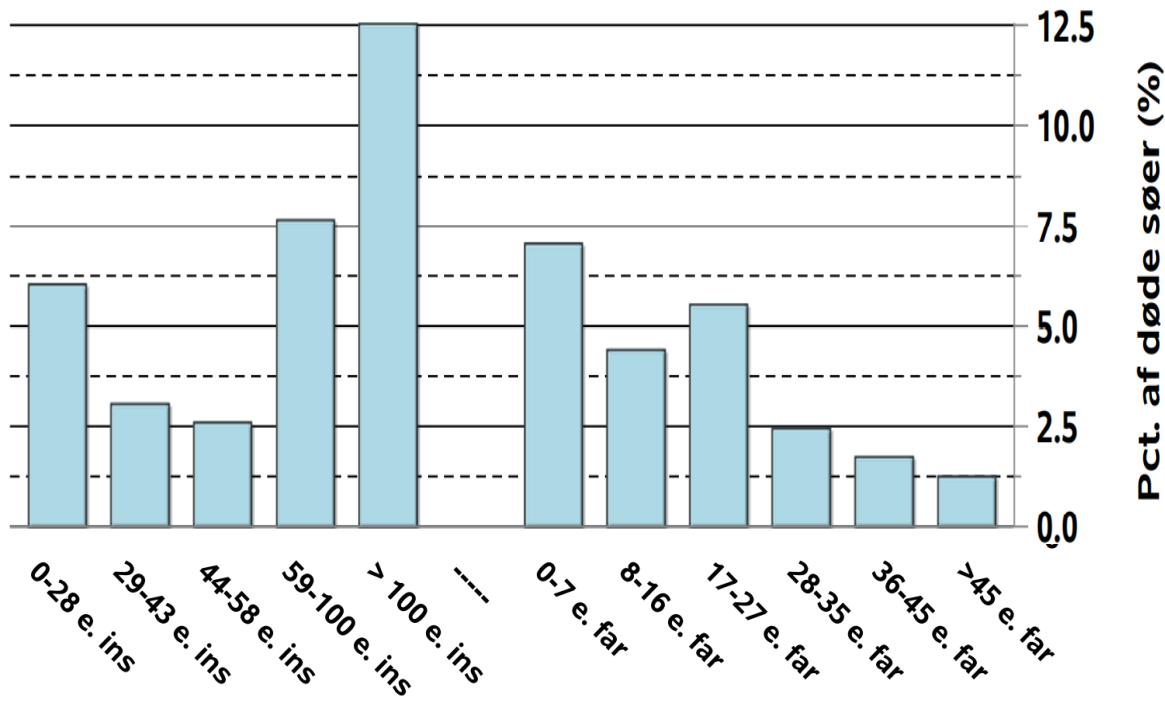
Distribution of sows that die or are euthanized (2019-2021)

- 50-60% dead
- 40-50% euthanized

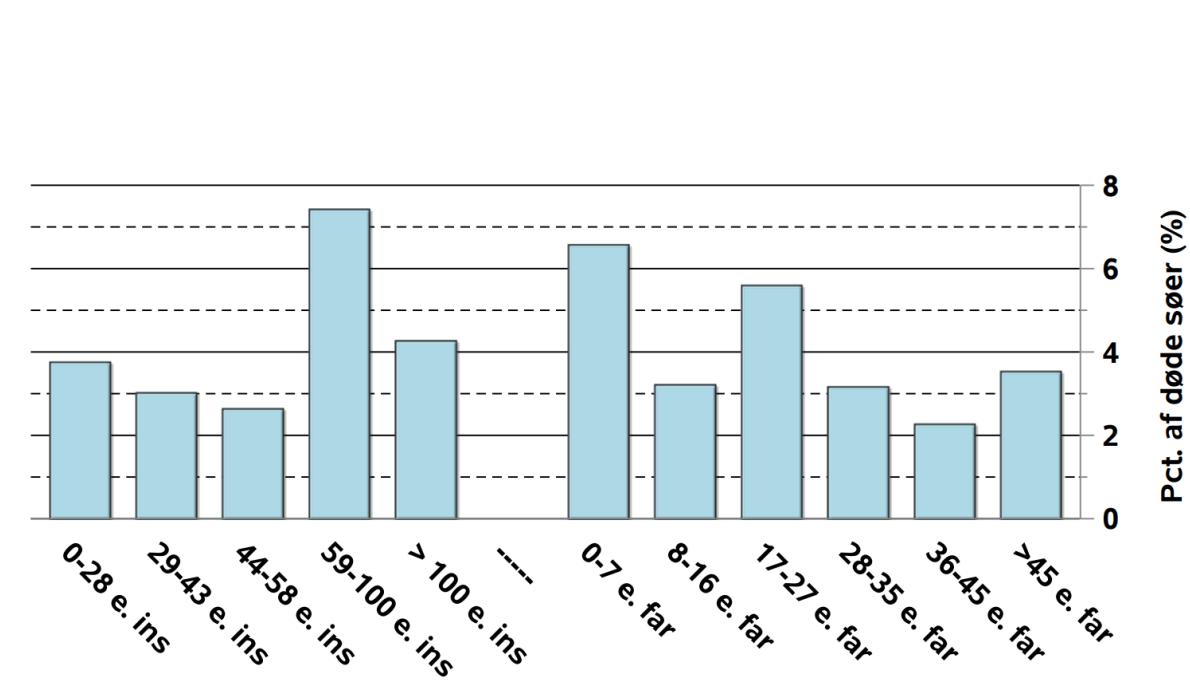


Time in cycle when sows die or are euthanized, % of sows

Dead

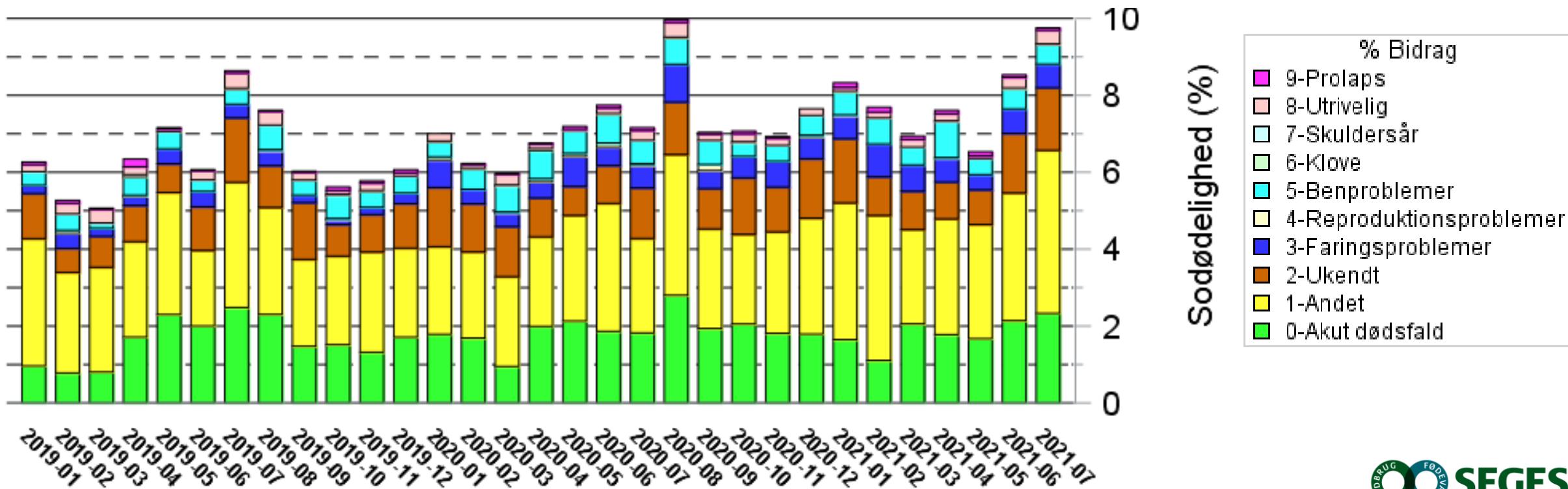


Euthanized



Dead sows – diagnosis by farm staff (2019-2021)

- For 80% of the dead sows a definite diagnosis is not made



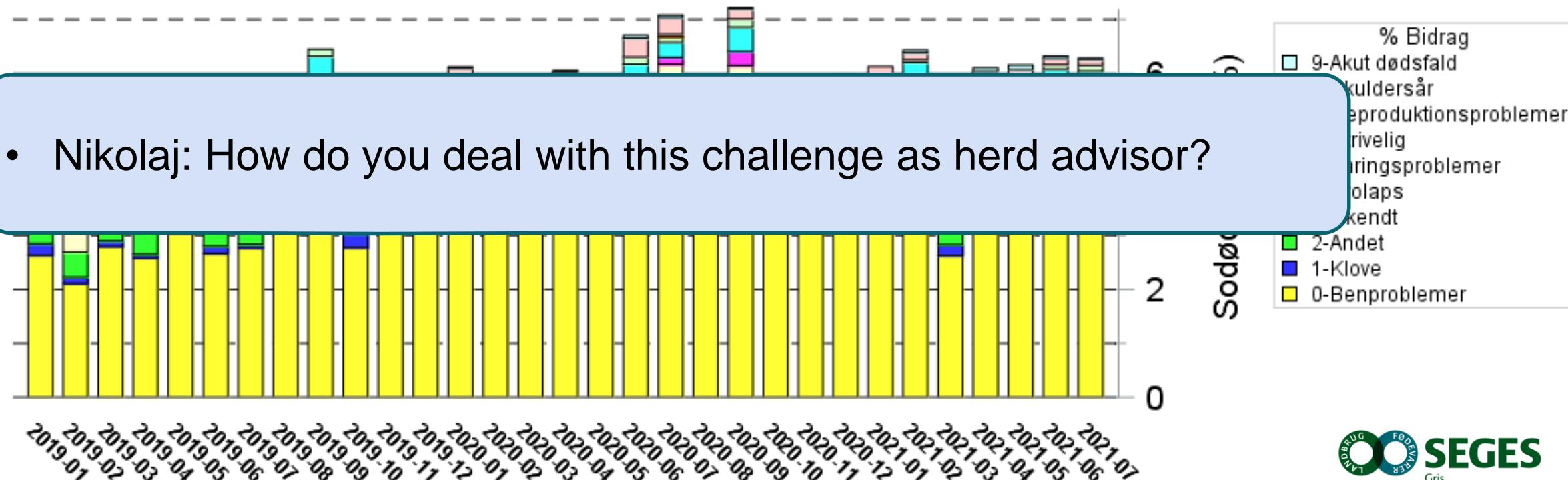
Dead – causes and solutions

- 10 farms/126 sows included in 2019 study
- 13% died before farrowing / 25% died within 5 days after farrowing
 - 42% died of torsion of liver
 - 17% died of farrowing complications
 - 17% died of infection
 - 18% died of intestinal torsion, circuit overload, gastric ulcer
- Feeding around farrowing (frequency, energy)
- Farrowing surveillance/aid
- Cooling during hot weather (heat stress)
- Feed texture



Euthanized sows – diagnosed by farm staff (2019-2021)

- 60-70% of the sows that are euthanized have claw/leg problems



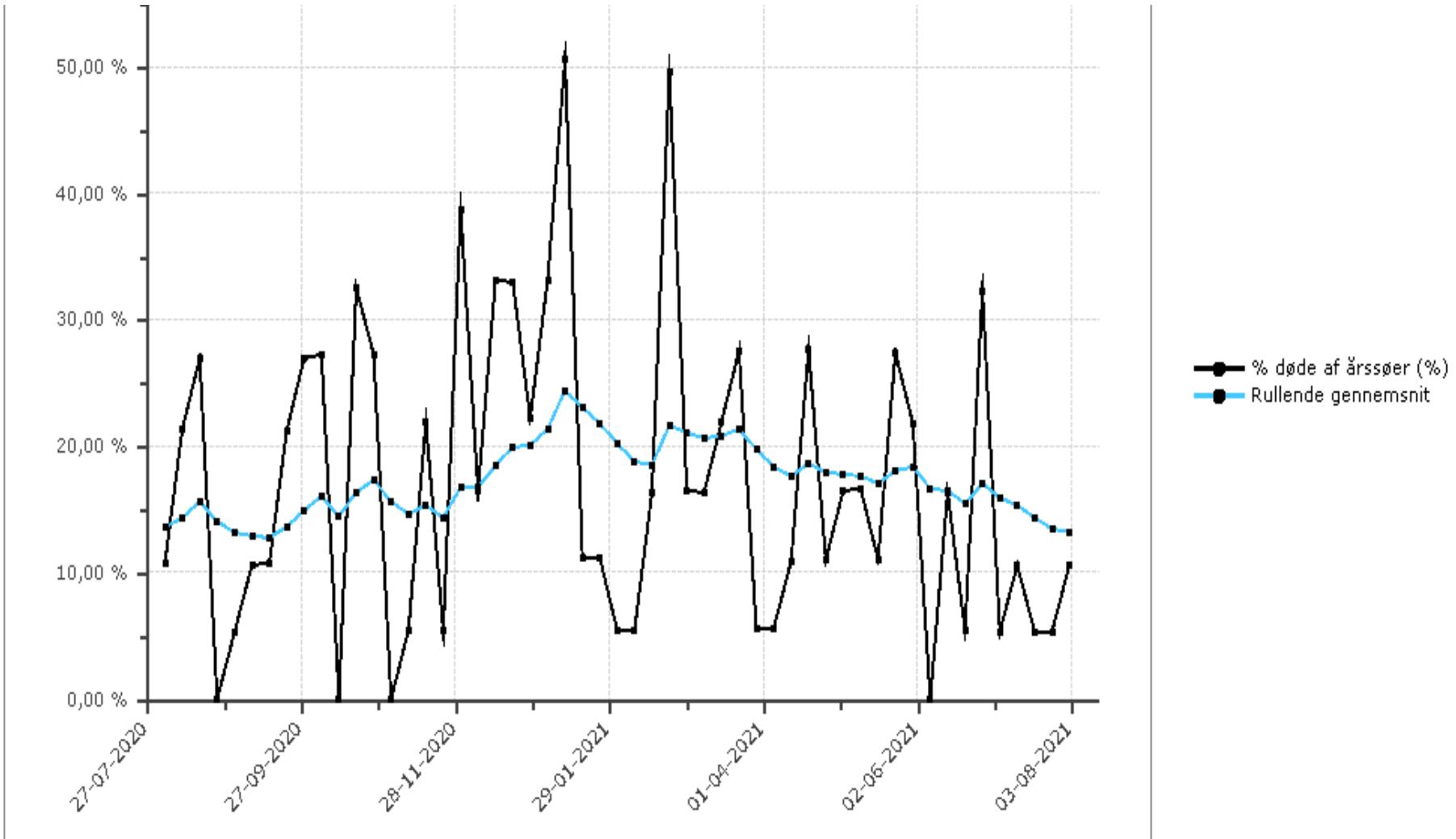
How do we deal with it on each individual farm

When are we satisfied

- ★ Sow mortality < 10%
- ★ 1st+2nd parity sows constitute max 20% of slaughtered or dead sows



Sow mortality



Age distribution and % of young sows that are culled

Gruppe	0	1	2	3	4	5	6	7	8	
Kuld nr.	0	1	2	3	4	5	6	7	8	
REPRODUKTION										
Løbninger	0	402	293	241	188	93	63	36	2	1318
Omløbninger	0	28	21	13	7	2	2	0	0	73
Kastninger	0	4	3	2	2	1	1	0	0	13
Dage fra frav. til 1. løbn. (gns.)			6,3	6,1	5,7	5,3	5,1	5,0	5,0	5,9
Dage fra løbning til omløbning		39,1	32,7	28,8	28,6	31,0	29,5			33,9
Dage fra løbning til udsætning		69,5	46,7	59,3	80,6	34,8	32,6	75,3	77,0	61,7
Udsatte & døde dyr	0	82	42	52	50	24	53	25	10	338
% døde af udsatte dyr		35,4	38,1	34,6	24,0	16,7	7,5	8,0	20,0	26,6
Døde sører	0	15	16	18	12	4	4	2	2	73

37% of culled sows are 1st + 2nd parity sows

67% of dead sows are 1st-3rd parity sows

Reasons for culling / diagnosis

Type	Kuld nr.	1	2

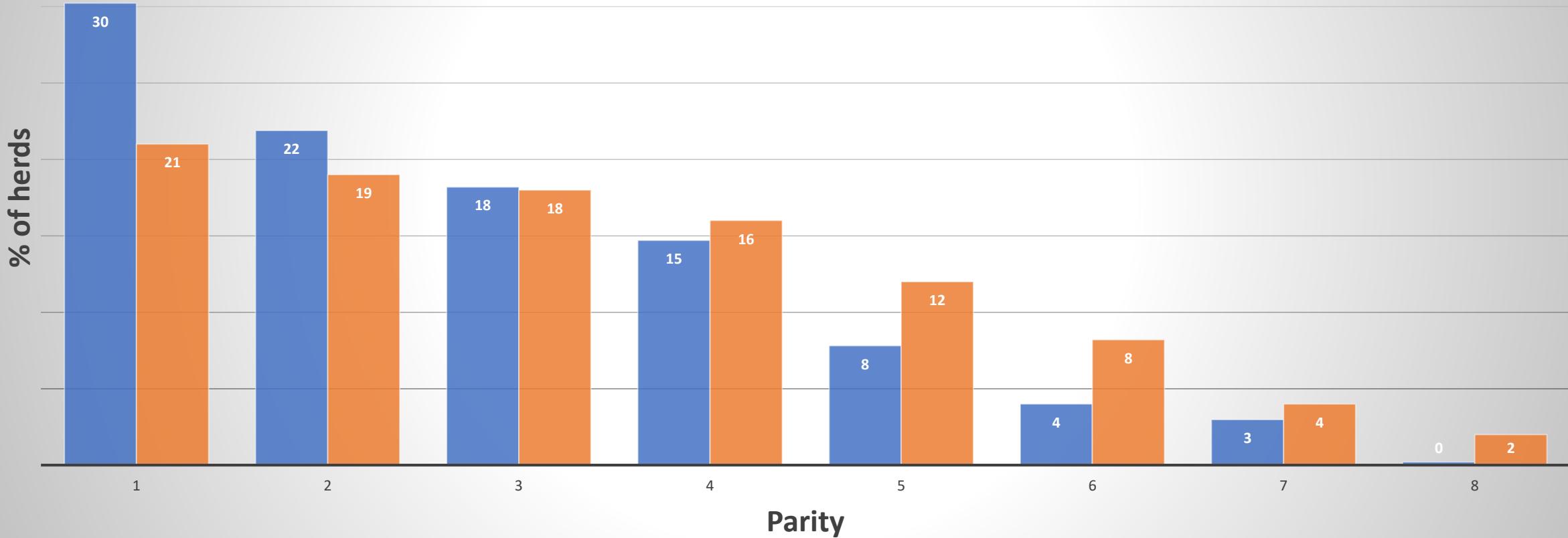
Åben	Afgang.Typ e	Dyr.Årsag.Navn	Gruppe		Resultat	
			Kuld	Antal kuld i pct. af total	Kuld	Antal kuld i pct. af total
✉	Aflivet		15	25,86		
✉		Andet	1	6,67		
✉		Bensvaged	8	53,33		
✉		Klov byld	1	6,67		
✉		Lam	3	20,00		
✉		Udskudt endetarm	2	13,33		
✉	Død		10	17,24		
✉			1	10,00		
✉		Andet	1	10,00		
✉		Børdrejning	1	10,00		
✉		Farestald	2	20,00		
✉		Pludselig	1	10,00		
✉		Transponder	4	40,00		
✉	Slaget		33	56,90		
✉		Alder	1	3,03		
✉		Bensvaged	12	36,36		
✉		Ikke drægtig	7	21,21		
✉		Kastet	3	9,09		
✉		Lange klove	1	3,03		
✉		Manglende brunst	7	21,21		
✉		Patter	2	6,06		
			58			

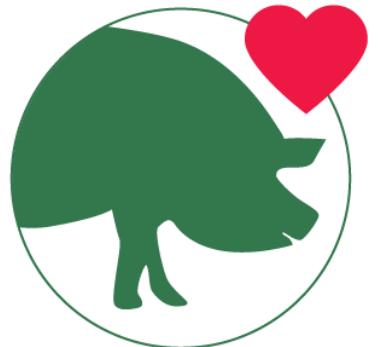
Common diagnoses

	Diagnosis
1	Udder infection
2	Thin / does not thrive
3	Shoulder lesions
4	Reproduction
5	Sudden death
6	Farrowing complications
7	Prolapse
8	Pastern lesions / hoof abscess
9	Leg problems
10	Batch size adjustment
11	Age
12	Other

Herd age – aim of averagely 3.5 litters

Age





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Claws



Feeding of gilts and sows
Body condition

Increased sow
survival rate
– focus on sow
mortality

Daily supervision
Use hospital pens

Grouping of gilts and sows
Floor and lying area



Introduction of gilts
Housing of gilts
Selection of gilts



Gilts require a great deal of attention

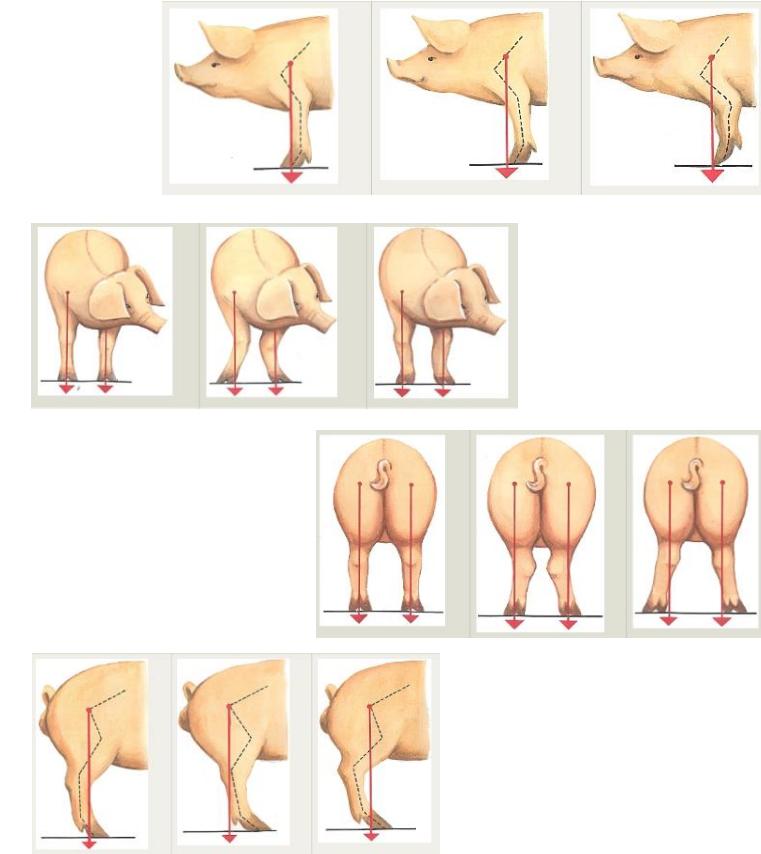
The perfect gilt at mating

- ★ 140-160 kg
- ★ 32-34 weeks
- ★ Backfat min. 14 mm
- ★ Uniform claws
- ★ Correct leg position

This applies to longevity as well as litter results

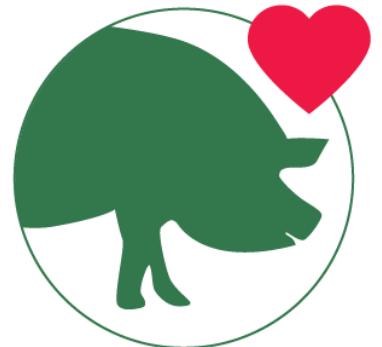
Sorting of gilts

- ★ 30 kg
- ★ 100 kg
- ★ Before mating



Space requirements

	Law requirement / legislation	Recommendation
7-30 kg	0.3 m ² /pig	+20%
30-50 kg	0.4 m ² /pig	+20%
50-85 kg	0.55 m ² /pig	0.75-1.0 m ² /pig
85-110 kg	0.65 m ² /pig	1-1.5 m ² /pig
110 kg +	1 m ² /pig	1.5-2.0 m ² /pig



SoLiv 2.0



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Grouping of gilts and sows

- Gilts and young sows are at increased risk of lameness in connection with grouping
- Only mate/inseminate "approved" gilts/sows
 - Not injured, not lame
- Space – space – space
- Non-skid flooring around grouping
 - Sprinkling, slotted floor, deep litter
- Full sows (double ration of feed on the day of grouping)
 - 50% more feed the first 4-5 days
 - Straw, hay.wrap, beet pellets



Grouping of gilts and sows

- Preferably stable groups
 - Alternatively semi-stable groups
- Transfer gilts 1-3 days before sows to stable groups
 - Group gilts before transfer to dynamic groups
- House gilts separately in stable / semi-stable groups
- Plenty of room for all gilts/sows to lie down in the pen
 - Low lying walls



Daily work in the gestation unit

- Clean solid floor when needed
 - Manure as far away as possible from lying area
- Check that all sows eat their ration
- Mark 'OBS sows' for the daily supervision
- Take care of sows with severe problems
 - Broken leg, attacked



Daily supervision is a task in itself

- All sows must be observed moving every day
 - 90% of all treatments are caused by leg and claw problems
- Work two and two together!
- Pay extra attention to gilts and pens with newly-grouped gilts/sows
- Straw will encourage the sows get up
- Systems and clear arrangements
 - Herd vet
 - Monitor 'OBS sows' the following days
 - Journal / mark treated sows
- Move severe cases to hospital pen



Location of hospital pens – it must be easy!



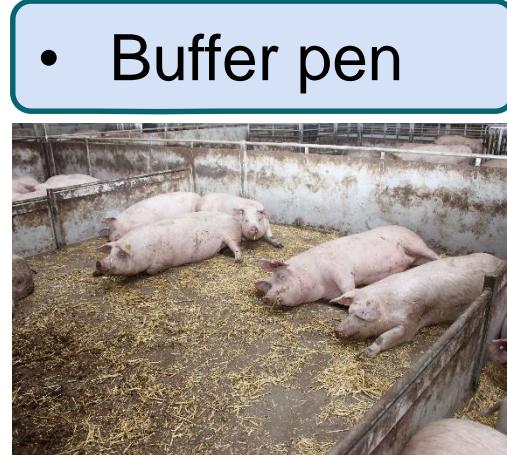
- Requirement (legislation): 2.5%
- Recommendation: 3-5-10%

Drained, bedded straw mat recommended in hospital pens (soft bed)



- Soft mat
- Tilted floor/level drop
- Fix mat

Flow in hospital pens





SoLiv 2.0



Claws

Feeding of gilts and sows
Body condition

Increased sow
survival rate – focus
on sow mortality



Daily supervision
Use hospital pens

Grouping of gilts and sows
Floor and lying area

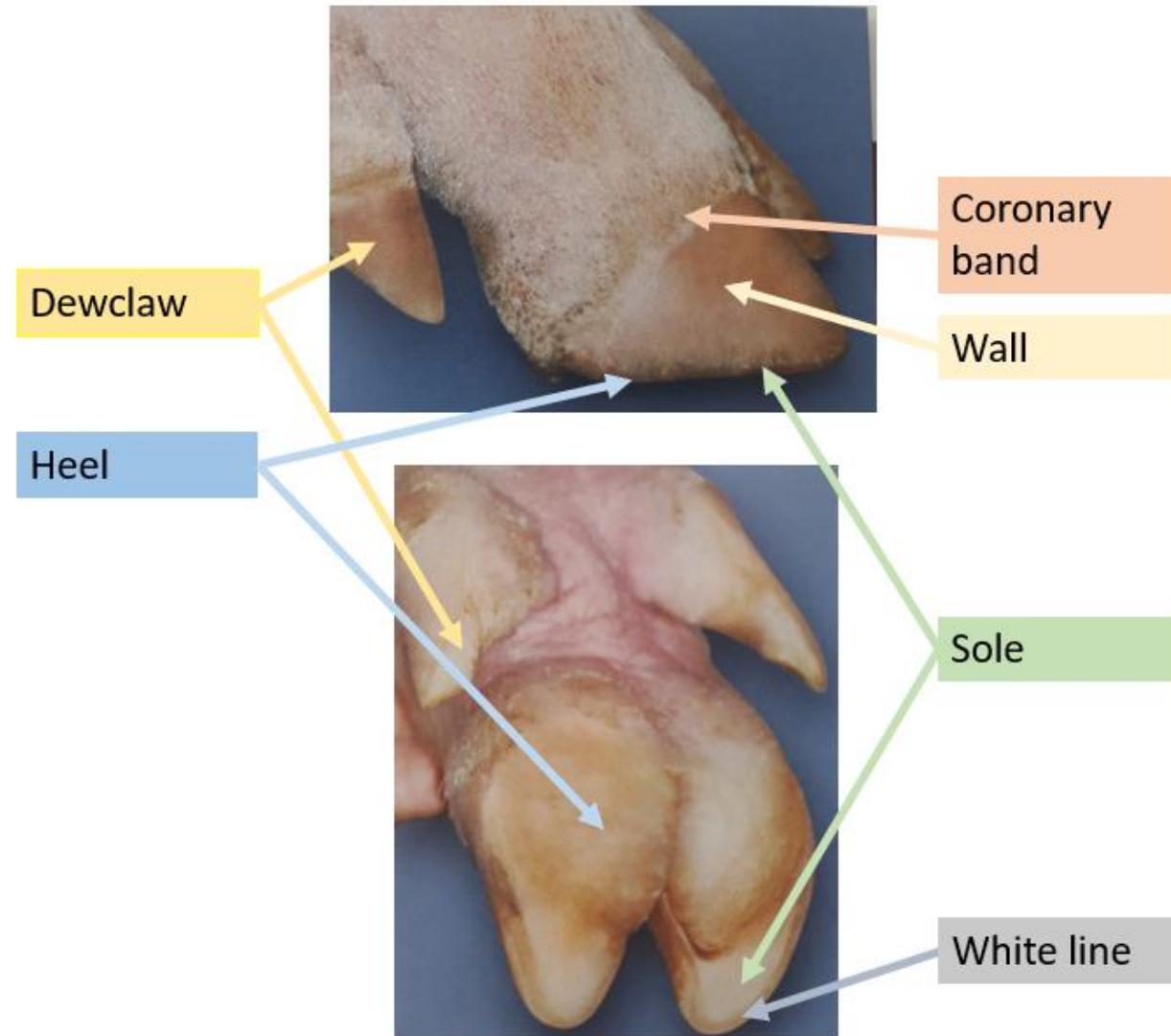


Introduction of gilts
Housing of gilts
Selection of gilts



Structure of a claw

The perfect claw



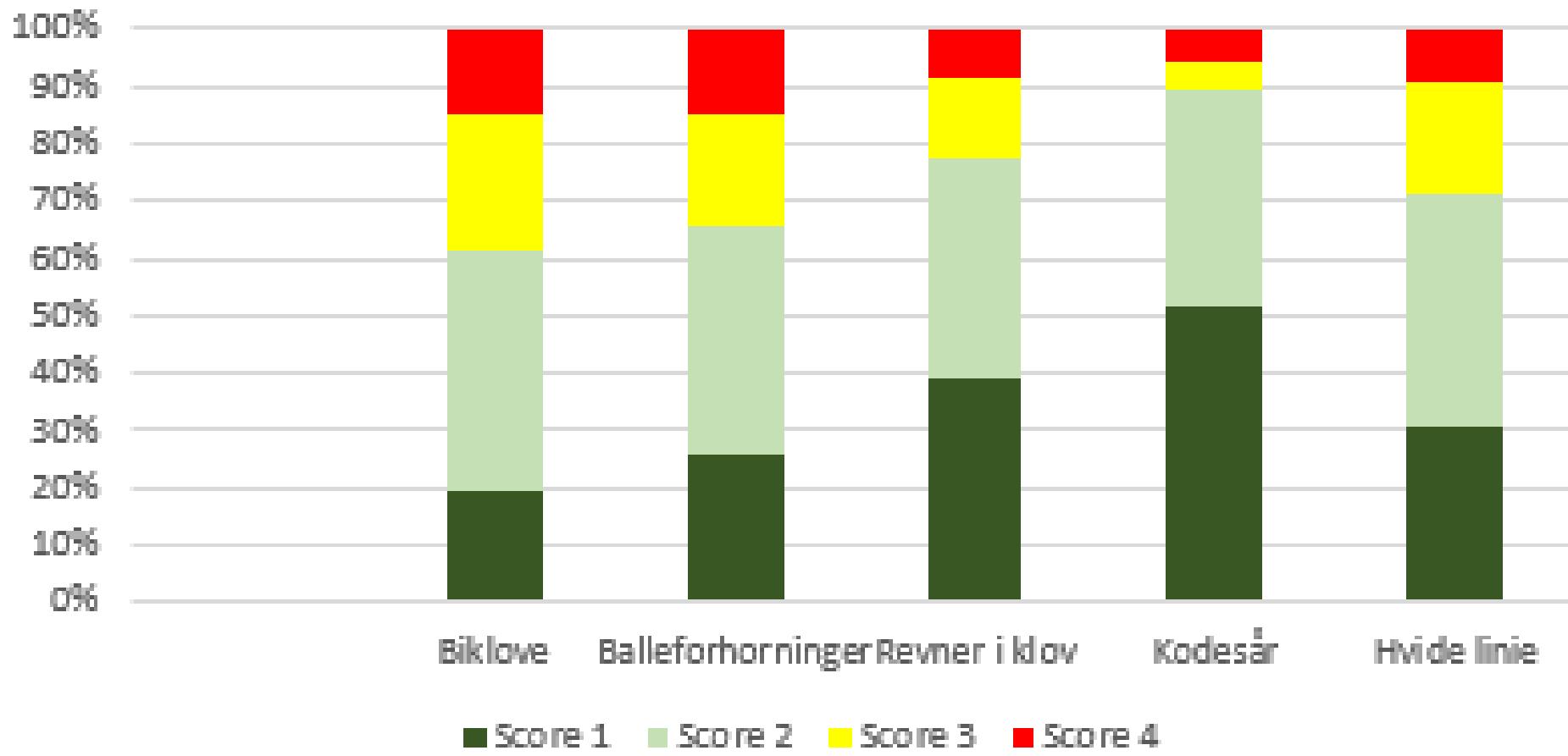
Assessment of claws and legs – a tool for advisors

Diegivende søger

Læg nr.	Biklove	Balleforhorninger	Revner i klov	Kodesår	Hvide linie



Alle kuld diegivende søger



Crack



Coronary band



White line



White line



Long dewclaws



Heel keratinization



Causes of claw problems

- ★ Stocking density
- ★ Moisture and manure
- ★ Floor and pen equipment
- ★ Grouping of gilts and sows
- ★ Selection of gilts

It all starts with a good gilt



Tomorrow, you must:

- ★ Optimize recordings of reasons for slaughtered or dead sows and gilts
- ★ Check longevity of young sows
- ★ Organize handling of gilts
- ★ Assess the quality of gilts' legs – claws – body condition – age – weight
- ★ Only buy pigs that can manage gestation
- ★ Evaluate daily supervision routines
- ★ Evaluate hospital pens – are they good enough
- ★ Ensure flow in hospital pens
- ★ Assess sows' claws in farrowing unit
- ★ Check pens for holes in floor/worn floors and worn pen equipment