

# **SWEDISH FARMING, BEEF PRODUCTION AND CHAROLAIS**

**- An overview 2018**

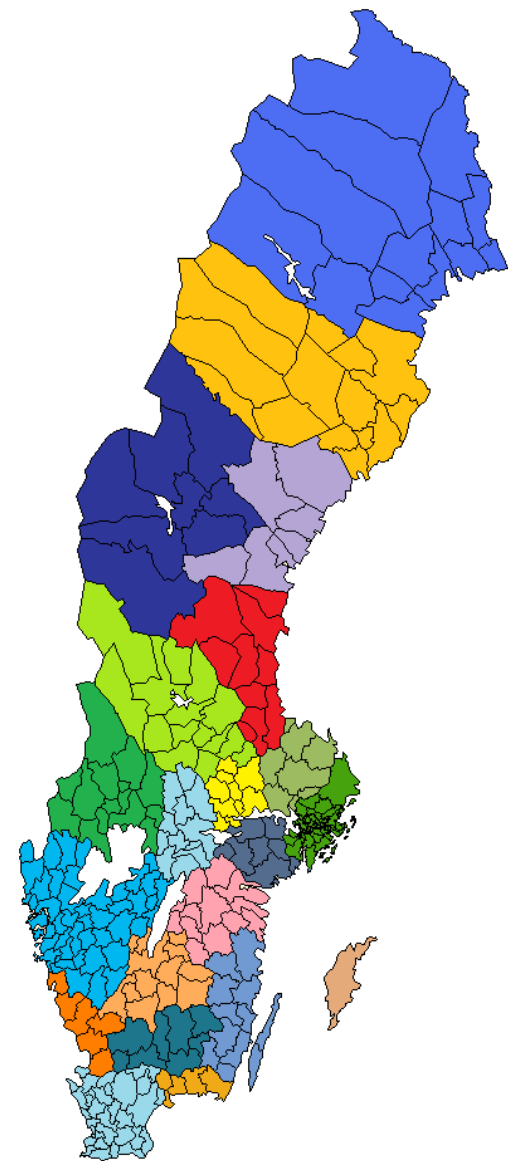
Sofia Persson and Lennart Nilsson  
The Swedish Charolais Association



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# Short about Sweden

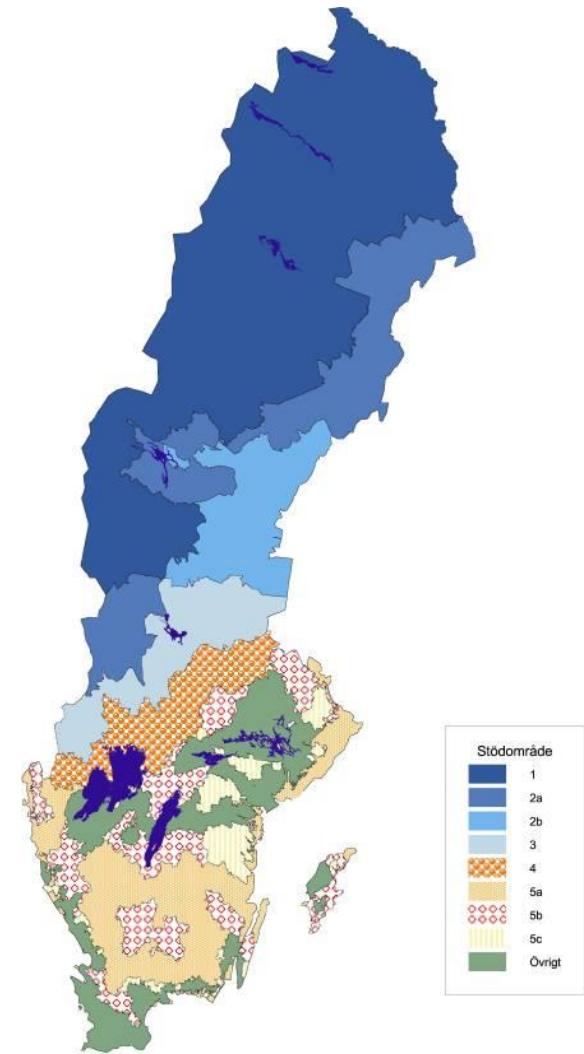
- 21 counties
- 290 municipalities
- 2523 parishes
  
- 87 % lives in urban areas
- Majority of citizens lives in the south half
  
- Stockholm capitol city and largest with 1,6 million citizens
- Gothenburg 590 000
- Malmoe 310 000



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# Short about Sweden

- 2,6 million hectar arable farmland
- 0,5 million hectar natural pastures
- 28 million hectar forrest
  
- 63 000 farms (year 2016)
- 15 000 professional farms
- 1,2 % of employment
  
- Less than 3900 dairy farms
- App. 330 000 dairy cows
- App 17 000 cattle farms
- App 1,5 million cattle
- App 1 250 pig holdings



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# Farming in Sweden

- 2,6 million hectares of arable farmland:
  - 1,1 million ha grasslands
  - 450 000 ha wheat – normally 80% winter wheat
  - 330 000 ha barley – mostly spring barley
  - 180 000 ha oats
  - 60 000 ha other grains
  - 66 000 ha peas and beans
  - 17 000 ha maize, 99 % for forage
  - 93 000 ha oilseeds
  - 31 000 ha sugar beets
- 450 000 ha natural pastures



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# Farming in Sweden

- Dairy farming and meat production the most valuable
- 330 000 dairy cows in less than 3 900 holdings
- Cattle farming most farms – app. 17 000
- 1,5 million cattle
- Decreasing milk and raising red meat production
- Growth in cropping value (not 2018!)
- Growth in production of eggs, poultry and vegetables/fruit



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# Beef production in Sweden

- App 525 000 cows in Sweden;
  - 330 000 milk cows
  - 195 000 suckler cows
- Total 20 000 suckler cows in 750 breeders herds
  - Of them 14 500 in herd books
- Charolais the biggest beef cattle breed with app. 4500 registred caivings



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# Meat consumption Sweden

- Increasing
- Whole meat, total ~ 53 kg/person
  - Beef 12,7 kg
  - Pork 15,1 kg
  - Lamb 1,4 kg
  - Chicken 22 kg
  - Game meats 1,6 kg
- Charcuteries and processed meat ~ 30 kg/person



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# Beef meat Sweden

- Production stagnant or small increase
- 2/3 from dairy cattle - decreasing
- 1/3 from beef breeds - increasing
- ~400 000 slaughtered cattle and 14 000 calves
- Average slaughter weight – increasing!
  - Cows 320 kg
  - Heifers 310 kg
  - Young bulls 338 kg



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# Beef meat Sweden

- Production ~ 53,5 % of consumption - increasing
- Import
  - Mainly EU ( Ireland, Netherlands and Germany) (60 %)
  - Outside EU, Brazil and Uruguay
- Low export ~ 15 % of production



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# Why low beef meat production versus consumption?

- Milk production decreasing – 12 % 2008 -> 2017
- Productivity increase - Lower number dairy cows (and herds!) – fewer bull calves born
- Suckler herds dependant on EU subsidies for grazing and environmental work
- Suckler herds, generally low economic benefit – hard to attract young farmers
- Trend is broken – more prefers Swedish Meat, more quality beef production.....



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# Consumers demands beef meat

- Very strong retail organization in grocery
  - Tough demands on supplier
  - Hard preassure on cost
  - Retailers own brands increasing
- Demand for quality and safe food
- Swedish consumers have high confidence in Swedish meat
  - attempts general labeling guiding consumers



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# Consumers demands beef meat

- Different segments
  - Low cost
  - Clear origin and quality
    - Ecologic and animal welfare
- Increasing amount of farmers selling their own meat
  - Local farm shop or "meat in a box"

**We achieved a break around 2014 when prices to farmer increased and still do because of demands from the market of Swedish meat, especially after discussions about MRSA and antibiotics.**



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# Swedish demands that affects breeding plans

- The hardest animal welfare laws in the world
  - Demands for more issues done by veterinary for example anesthesia when dehorning, rules against regular treatments, demands for investigations makes for example regular caesaren impossible etc.
- High environmental and climate market demands
- High costs of housing, labor and infrastructure



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# Swedish demands that affects breeding plans

- Gives demands for both effective production AND functionality
  - Ease of calving
  - Low labor input
  - Polled breeds
  - High growth and classification
  - Climate effectivity



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# Beef breeds in the monitoring system KAP

Breed	Number of calvings pure bred 2017
Charolais	4368
Hereford	3086
Simmental	1976
Limousin	1377
Angus	1530
Highland Cattle	383
Blonde d'Aquitaine	279
Others	260



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# Organisation breeding work

- Swedish Board of Agriculture
  - Responsible for regulation of breeding in general
- Växa Sverige
  - Responsible for beef breed evaluation
  - Advice services, assisting weighting, AI technicians
- Nordic Breeding Association (NAB)
  - Beef breeds working together in common issues
  - Keeping the herd book for beef breeds
  - Arrange shows for beef breeds



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# Organisation breeding work

- Swedish Breed Associations
- Swedish Performance Testing Station
  - Individual performance testing of young bulls
  - Development of breeding evaluation methods
- Swedish University of Agricultural Sciences
  - Research and education in breeding issues



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# Organisation breeding work

- Interbeef
  - Working group of the International Committee for Animal Recording (ICAR)
  - Aim to improve and develop performance recording and evaluations of livestock
    - Comparable breeding values between countries
  - Sweden participate in development
- VikingGenetics
  - AI cooperative
  - Successful Beef bull program



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# Performance testing at Gunnarp

- Center of Swedish Beef breeding
- Svensk Köttprövning – company owned by Breeding organisations, Slaughter industry and VikingGenetics
- All main beef cattle breeds
- Totally 175 bulls including 75 Charolais
- Housing and feeding as on commercial farms



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# Performance testing station



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# Performance testing at Gunnarp

- Period start end August, test period 154 days
- All bulls in each breed have 100% equal conditions
- Registration of and sorting by growth, fertility, claws, linear scoring and docility
- Marbling score under development
- Official growth index "T-tal"
- Bulls for AI bought by Viking Genetics
- Qualified bulls sold at auction



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# Selection procedure Charolais bull calves



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# Swedish Charolais Association

- Founded 1969
- App. 400 members
  - Around 40-50 breeders that take part in the official test station programme



**Svenska Charolaisföreningen**

[www.charolais.nu](http://www.charolais.nu) | [info@charolais.nu](mailto:info@charolais.nu) | [webmaster@charolais.nu](mailto:webmaster@charolais.nu)

Sveriges Mötesplats för svenska charolaisuppfödare



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# Swedish Charolais Association

- Arranges meetings and seminars incl social activities
- Participates in cooperation with other beef breeds in shows and other activities
- Breeding advisory committee



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# History of Swedish Charolais

- 1959 First Charolais semen import from Canada
- 1961 First purebred Charolais bull from France through Denmark
- 1962 First purebred females, totally about 15 imported Charolais, also this time through Denmark
- 1968/69 App 300 Charolais heifers and bulls imported from France
- 1970-80's Several imports from Denmark
- 1990's Cattle, semen and embryo's imported from Canada
- Today Semen and embryo imports from NA, Australia and Europé – France, UK, Norway etc.  
Exports to several countries



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# Swedish Charolais breeding goal

- Leading role in Swedish cross breeding as terminal breed under the conditions:
  - The hardest animal welfare laws in the world
  - High environmental and climate market demands
  - High costs of housing, labor and infrastructure
- Attractive animals on export market



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# Breeding goals

- High growth, feed efficiency and excellent carcass characteristics
  - Bulls 350-375 kg carcass weight at 12-14 months
  - Heifers > 275 kg carcass weight at 12-14 months
- Easy calving
  - First calving at 24-26 months
  - Calving without assistance
  - Bull calves 49 kg, Heifer calves 46 kg
- Polled animals



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# Breeding goals

- Fertility
  - Testicle circumference  $> 32$  cm at 12 months
  - Bulls mating at 12 months
  - Early sexual maturity in heifers, clear heat signals
  - Calving interval 12 months
- Milk production
  - No need for extra feeding of calves to perform 200-days weight



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# Breeding goals

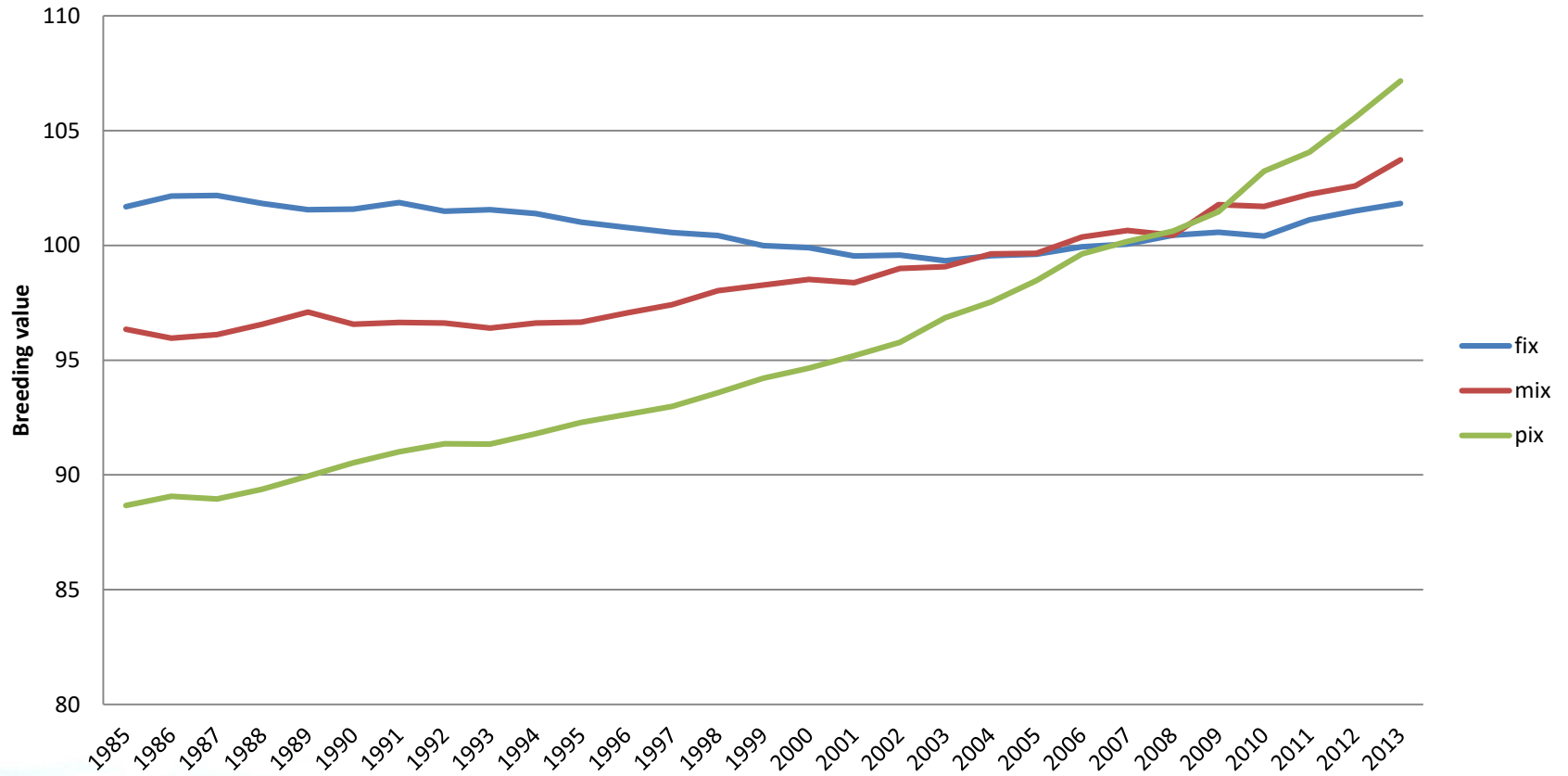
- Maintenance and size
  - Cows performing on both extensive and intensive pastures
  - Adult cow 750 – 900 kg live weight after weaning
- Exterior conformation
  - Good function, strong legs, joints and claws for longevity
  - Udder and teats shaped so the calf needs no assistance
- Docility
  - Easy to handle



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# Genetic trend

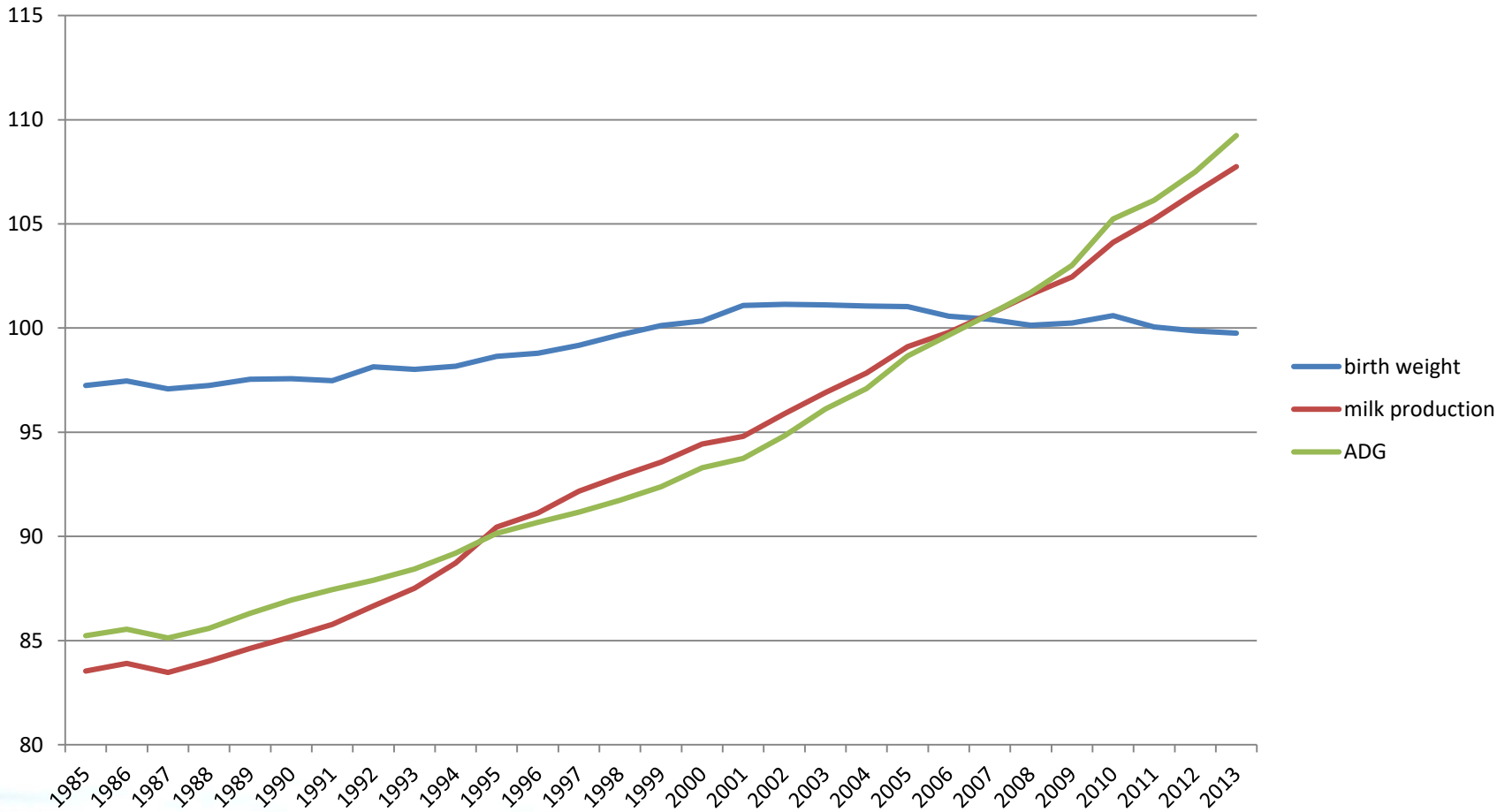
Average Charolais composite breeding values



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# Genetic trend



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# Calving in figures 2017

- Average age at first calving 27,2 months
- Average calving interval 12,4 months
- Birth weight bull calves 49 kg, heifers 46 kg
- 100,0 weaned calves from 100 calvings



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