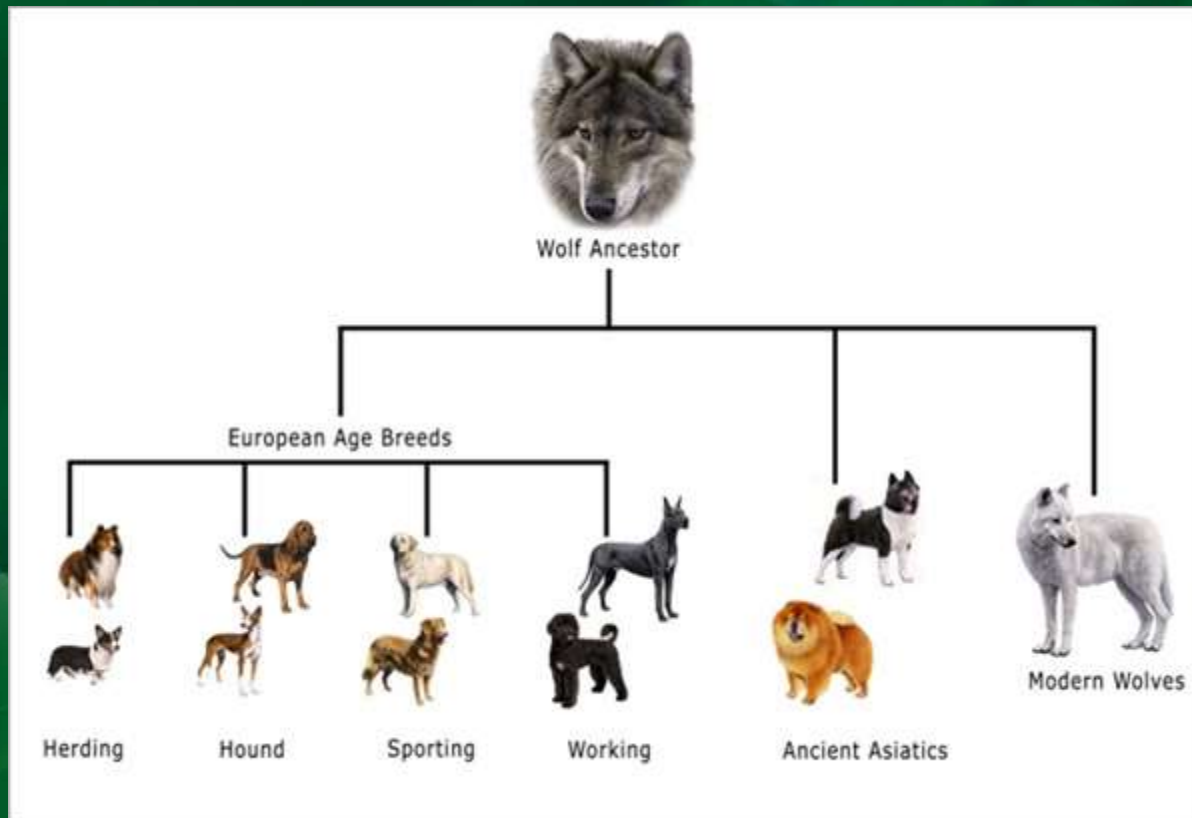


Dog Behavior: An Evolutionary Perspective

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Honors Program

Common Ancestor



Source: http://www.wisdompanel.com/breed_count_matters/history_of_the_dog/

Transition to Modern Dog

First Stage

- Began 15-25 thousand years ago
- Similarities in basic nature of men and wolves
- Wolves started domestication process
 - Wolves with higher proximity tolerances began to scavenge from humans
- Why humans allowed scavenging behavior
 - May have benefitted from wolves' presence
 - “Apparently universal human trait of keeping animals as pets” (Bradshaw 2011)
- Subset of wolf population became tame

Close Relationship of Man and Dog



- Human of old age buried with puppy of 4-5 months
- Upper Jordan Valley
- 10-12 thousand years ago

Transition to Modern Dog

Second Stage

- Began 5000-7000 years ago
- Man began to select desired traits from natural variances
- Based primarily on behavior and function
- Natural selection remained primary driving force behind morphology



Dog collar from Viking grave site, Oslo Ship Museum

Courtesy of Dr. Donal O'Toole

Transition to Modern Dog

Third Stage

- Began 200-400 years ago
- Pedigree breeding
- Radical specialization

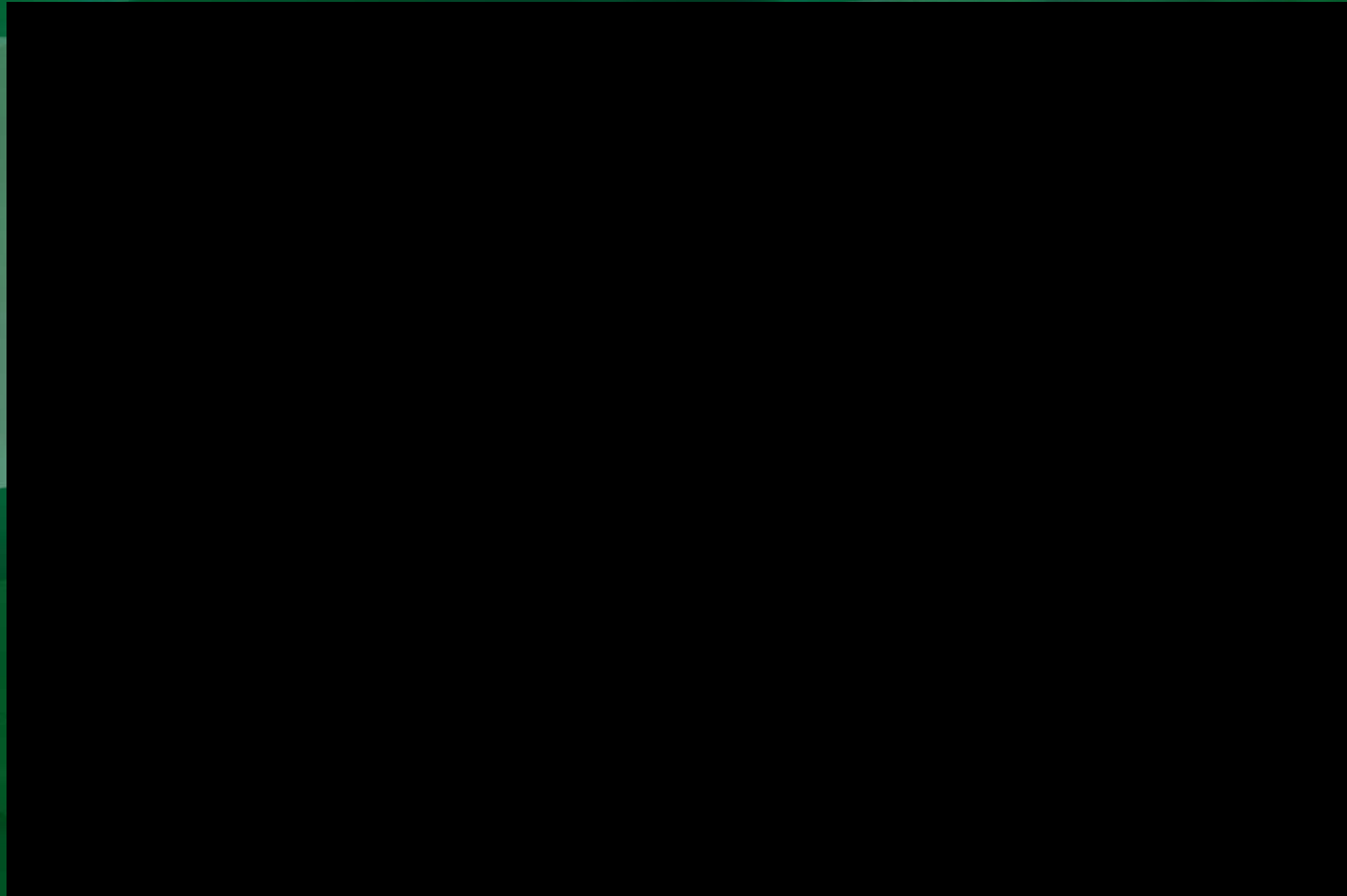


Implications of Evolutionary History

- Feral dogs that are socialized to humans early become indistinguishable as adults from domestic dogs raised with humans
- Same is not true of wolves



Excerpt from BBC Horizon's
The Secret Life of the Dog



Implications of Evolutionary History

- Pointing is uniquely human behavior
- Chimpanzees can not follow pointing gesture
- Dogs also follow eye movement



Silver Fox Experiment

- Long-term behavioral experiment of domestication of silver foxes
- After 3 generations – aggression began to disappear from population
- After 8 generations – majority began to seek human contact and show affection



Source: http://www.bioacoustica.org/projects/vulpes_eng.html



Source: <http://www.coolpicturegallery.us/2011/04/domesticated-silver-fox.html>

Silver Fox Experiment

- Behavior of kits independent of mother's behavior
- After more than 40 generations, foxes show many traits similar to domestic dogs



Source:

<http://brightonbeach2011.blogspot.com/2011/04/domesticated-silver-fox.html>

- But more similar to domestic cats than to dogs overall
 - Different kind of social relationship with humans

Breed Behavior

- Sled dogs
 - Energetic, dog-friendly, eager to play
 - Notoriously difficult to leash train



Source: <http://beyondpenguins.ehe.osu.edu/the-last-great-race-teaching-the-ityitarod>

Source: <http://www.squidoo.com/top-attractions-to-visit-in-anchorage-alaska>

Breed Behavior

- Herding dogs
 - Chase instinct, focus, vocalization
 - Specific motor patterns



Source:

<http://www.dogbreedinfo.com/bordercolliephotos2.htm>



Source: <http://wahthyedmcd.blogspot.com/2011/04/herding-group.html>

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