Evidence for PIE homeland

• the physical world
  no common word for ocean
  *móri 'lake': OIr muir 'sea', Lat mare 'sea', OE mere 'lake' 'sea'?; OCS morje 'sea'
  snow: *sneigwh-: OIr snigid 'snows', Lat nivit 'snows', OE sniwan, AV snaēžaiti 'snows'
  ice: *yeg-: OIr aig, Eng icicle (OE is-gicel)
• wild animals:
  bear, fox, wolf, beaver, otter, hedgehog, elk
  beaver not found in Greece or Anatolia
  *bhébhrus: Eng beaver, Lat fiber, Lith bebrús, Rus bobr, Av bawra-
• these animals imply a partly forested region
  bear and elk are forest dwelling
  otter and beaver dwell in riverine forests
• trees that grow in temperate climates:
  birch (6 branches), willow, ash, oak
  European dialects: elm, juniper, alder, apple, hazel, cherry (IE? later?)
  absence of trees from Mediterranean or warmer climates, such as olive, palm, cypress
• boats: 4 roots, all appear to designate canoes or other small craft for crossing lakes and rivers
  boat: *néhus (< *(s)néh- 'swim'): OIr náu, Lat nāvis, Gk naûs, Skt nau-
• domestic animals
  *péku 'livestock', (cattle): Lat pecus, OE feoh, Lith pėkus, Av pasu
  *gwous 'cow': Lat bos, Eng cow, Gk bous, Skt güau-
  *uksen- 'ox': Eng ox, Skt ukán-, Av uxšan- 'bull', Welsh ych
  *hékwos 'horse': Lat equus, Gk híppos, OE eoh, OIr ech, Skt áśva-
• 3500 BC 1st evidence of horseback riding on the Pontic-Caspian steppes: microscopic abrasions on horses’ teeth from clamping the bit
• 3400-3300 invention of wheeled vehicles, gives us the earliest possible date for the breakup of PIE
  *kwekwlóm: Eng wheel, Gk kúklos, Skt cakrám
  axle: *heks-: Lat axis, OE eax, Lith ašis, Gk áksôn, Skt ákṣa
  yoke: *yugom
• Kurgan cultures: burial mounds
  pastoral economy, hierarchical social structure, patriarchy, aggressive warfare, animal sacrifice, use of the horse, wheeled vehicles, worship of a solar deity
  area included steppes and forest
  recent adoption (or invention) of wheel technologies
  stockbreeding
  use of domesticated horse
• between 3100 and 2900 BC: spread of kurgan cultural practices, including burials into eastern Hungary and the lower Danube