

## Successful cryopreservation of African wild dog (*Lycaon pictus*) spermatozoa: Towards developing the frozen zoo.

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Sperm freezing and artificial insemination can aid species management and conservation of the African wild dog (*Lycaon pictus*). Freezing attempts have previously been unsuccessful with sperm motility dropping to nearly 0% within 2 h of thawing. We examined the quality of wild dog spermatozoa subjected to 2 routine canine cryopreservation protocols: 1) 1-step dilution in TRIS-egg yolk extender containing 8% glycerol and 20% egg yolk; and 2) 2-step dilution in TRIS-egg yolk extender to a final concentration of 5% glycerol, 20% egg yolk and 0.5% Equex STM. Protocol 2 showed a significantly higher post-thaw viability, acrosome integrity and longevity of spermatozoa with motility present for up to 8 h after thawing; making it suitable for sperm banking and downstream use in species management by artificial insemination for the first time.