Risk Assessment

The following risk assessment determines the risk of AFRICAN WILD DOG (*Lycaon pictus*) to Tasmania using the Bomford model (2008) and proposes assigned threat categories and import classifications for the species.

Species:	AFRICAN WILD DOG (*Lycaon pictus*)	
Date of Assessment:	04 August 2017	
Literature search type and date:	1. Species Profile provided by applicant 2. IUCN Red List profile: http://www.iucnredlist.org/details/classify/12436/0 3. Leigh, Kellie A. 2005. The ecology and conservation biology of the endangered African wild dog (Lycaon pictus) in the Lower Zambezi, Zambia. PhD Doctorate. University of Sydney. https://ses.library.usyd.edu.au/handle/2123/1545 4. Ginsberg, Joshua R., Macdonald, David W. (David Whyte), Woodroffe, Rosie. 1997. The African Wild Dog: Status Survey and Conservation Action Plan. IUCN/SSC Canid Specialist Group.	
Factor	**Score**	
A1. Risk posed from individual escapees (0-2)	1	*Species can make unprovoked attacks causing moderate injury (requiring medical attention) or severe discomfort but is highly unlikely to cause serious injury (requiring hospitalisation) if unprovoked OR the animal is unlikely to make an unprovoked attack but can cause serious injury (requiring hospitalisation) or fatality if cornered or handled.*
A2. Risk to public safety from individual captive animals (0-2)	0	*Nil or low risk to public safety from individual captive animals.*
Stage A. Risk posed by individual animals (risk that a captive or escape animal would harm people)	**Public Safety Risk Score** = A1 + A2 = 1	**Public Safety Risk Ranking** A ≥ 2, Highly Dangerous A = 1, Moderately Dangerous A = 0, Not Dangerous = MODERATELY DANGEROUS
B1. Climate match score (1-6)	3	The provided Species Profile has not included the entire native range over the

		past 1000 years (as required by the Policy). A separate climate match has been prepared based on the historic distribution identified in Leigh (2005). *Based on revised climatch, there are eight squares in the top five climate-match classes (10, 9, 8, 7, and 6) = 3 (Moderate)*
B2. Exotic population established overseas score (0-4)	0	*No exotic populations have been established.*
B3. Overseas range size score (0-2)	1	*1-70 million km².* Based on Leigh (2005) distribution, overseas range size estimated at 12.7 million km².
B4. Taxonomic class score (0-1)	1	*Mammal.*
Stage B. Likelihood of establishment (risk that a particular species will establish a wild population in Tasmania)	**Establishment Risk Score** = B1 + B2 + B3 + B4 = 5	**Establishment Risk Ranking** B = 11-13, Extreme B = 9-10, High B = 6-8, Moderate B ≤ 5, Low = LOW
C1. Taxonomic group (0-4)	4	*Order Carnivora (2)* *Family: Canidae (2)*
C2. Overseas range size (0-2)	1	*10-30 million km².* Based on Leigh (2005) distribution, overseas range size estimated at 12.7 million km².
C3. Diet and feeding (0-3)	2	*Mammal that is a strict carnivore and strictly ground living.*
C4. Competition for native fauna for tree hollows (0-2)	0	*Does not use tree hollows.*
C5. Overseas environmental pest status (0-3)	0	*Never reported as an environmental pest in any country or region.*
C6. Climate match to areas with susceptible native species or communities (0-5)	4	*50% of the geographic range of one or more susceptible native species native species or ecological communities that are listed as threatened under Tasmanian legislation lies within the mapped area of the six climate match classes (10, 9, 8, 7, 6, and 5).* Based on the revised climate match and known distribution of the Tasmanian Devil.
C7. Overseas primary production (0-3)	2	*Moderate pest of primary production in any country or region.*

		"Wild dogs do take livestock in some areas, but this is a fairly rare occurrence… Nevertheless wild dogs can occasionally become a severe problem for livestock, especially smaller stock such as sheep and goats" (Ginsberg et al. 1997).
C8. Climate match to susceptible primary production (0-5)	5	TCDS of 150.4 = 5
C9. Spread disease (1-2)	2	*Mammal.*
C10. Harm to property (0-3)	0	*<$100,00 per year.*
C11. Harm to people (0-5)	3	*Injuries or harm moderate but unlikely to be fatal and few people at risk.*
Stage C. Consequence of Establishment (risk that an established population would cause harm)	**Consequence Risk Score** = sum of C1 to C11 = 23	**Consequence Risk Ranking** C > 19, Extreme C = 15-19, High C = 9-14, Moderate C < 9, Low = EXTREME
ASSIGNED THREAT CATEGORY:	**EXTREME** **SERIOUS** **MODERATE** **LOW** **EXTREME UNTIL PROVEN OTHERWISE**	
PROPOSED IMPORT CLASSIFICATION:	**PROHIBITED** **IMPORT RESTRICTED TO THOSE LICENCE HOLDERS APPROVED FOR KEEPING SERIOUS THREAT SPECIES** **IMPORT RESTRICTED TO THOSE LICENCE HOLDERS APPROVED FOR KEEPING MODERATE THREAT SPECIES** **IMPORT PERMITTED**	

CALCULATING TOTAL COMMODITY DAMAGE SCORE

Column 1	Column 2	Column 3	Column 4	Column 5
Industry	**Commodity Value Index (CVI)**	**Potential Commodity Impact Score (PCIS, 0-3)**	**Climate Match to Commodity Score (CMCS, 0-5)**	**Commodity Damage Score (CDS columns 2 x 3 x 4)**
Cattle (includes dairy and beef)	**11**	2	4	88
Timber (includes native and plantation forests)	**10**	0	-	-
Aquaculture	**6**	0	-	-
Sheep (includes wool and meat)	**5**	2	4	40
Vegetables	**5**	0	-	-
Fruit (includes wine grapes)	**5**	0	-	-
Poultry (including eggs)	**1.5**	2	4	12
Cereal grain (includes wheat, barley, sorghum etc)	**1**	0	-	-
Other crops and horticulture (includes nuts and flowers)	**1**	0	-	-
Pigs	**1**	2	4	8
Bees (includes honey, beeswax, and pollination)	**0.5**	0	-	-
Oilseeds (includes canola, sunflower etc)	**0.5**	0	-	-
Grain legumes (includes soybeans)	**0.3**	0	-	-
Other livestock (includes goats and deer)	**0.3**	2	4	2.4
Total Commodity Damage Score (TCDS)				150.4

APPENDIX B: ASSIGNING SPECIES TO THREAT CATEGORIES

A: Danger posed by individual animals (risk a captive or escaped individual would harm people)	**B: Likelihood of establishment** (risk that a particular species will establish a wild population in Tasmania)	**C: Consequence of establishment** (risk that an established population would cause harm)	**Threat category**	**Implications for any proposed import into Tasmania**
Highly, Moderately or Not Dangerous	Extreme	Extreme	Extreme	Prohibited
Highly, Moderately or Not Dangerous	Extreme	High		
Highly, Moderately or Not Dangerous	Extreme	Moderate		
Highly, Moderately or Not Dangerous	Extreme	Low		
Highly, Moderately or Not Dangerous	High	Extreme		
Highly, Moderately or Not Dangerous	High	High		
Highly, Moderately or Not Dangerous	Moderate	Extreme		
Highly, Moderately or Not Dangerous	High	Moderate	Serious	Import restricted to those licence holders approved for keeping serious threat species
Highly, Moderately or Not Dangerous	High	Low		
Highly, Moderately or Not Dangerous	Moderate	High		
Highly Dangerous	Moderate	Moderate		
Highly Dangerous	Moderate	Low		
Highly, Moderately or Not Dangerous	Low	Extreme		
Highly, Moderately or Not Dangerous	Low	High		
Highly Dangerous	Low	Moderate		
Highly Dangerous	Low	Low		
Moderately or Not Dangerous	Moderate	Moderate	Moderate	Import restricted to those licence holders approved for keeping moderate threat species
Moderately or Not Dangerous	Moderate	Low		
Moderately or Not Dangerous	Low	Moderate		
Moderately Dangerous	Low	Low		
Not Dangerous	Low	Low	Low	Import permitted
Unknown	Any value	Any value	Extreme until proven otherwise	Prohibited
Any Value	Unknown	Any value		
Any Value	Any value	Unknown		
Unassessed	Unassessed	Unassessed		