

External trait variations key

Character			Trait variations			
Feathers	A	Scale-like feathers	absent (0)	present (1)		
	B	Contour of the central shaft of the feathers	cylindrical (0)	flat and broad (1)		
	C	Leading edge of flipper, pattern of underside	white (0)	incompletely dark (1)	completely dark and wide (2)	
	D	Yellow in crown feathers	absent (0)	present (1)		
	E	Head plumes	absent (0)	present (1)		
	F	Compactness of head plumes, if present	compact (0)	sparse (1)		
Beak	G	Beak tip shape for the top of the beak	pointed (0)	weakly hooked (1)	strongly hooked (2)	
	H	Color on the bottom of the beak	black (0)	reddish (1)	pink (2)	yellowish (3)
	I	Color on top of the beak	black (0)	red (1)	orange (2)	
Eye	J	White eyebrow	absent (0)	narrow, from postocular area (1)	narrow, from preocular area (2)	wide, from preocular area (3)
	K	Fleshy eye ring	absent (0)	present (1)		
	L	White eye ring	compact (0)	sparse (1)		
Feet	M	Color of the top of their feet	dark (0)	pinkish (1)	orange (2)	whitish (3)
	N	Soles of their feet are darker than the top of their feet	absent (0)	present (1)		
	O	Foot nail shape	flat (0)	compressed (1)		
Nest, eggs, and chicks	P	Nest	no nest, incubation over the feet (0)	nest placed in rock cracks or buried in sand (1)	open nest in a shallow depression (2)	
	Q	Eggs, shape	oval (0)	conical (1)	spherical (2)	
	R	Clutch size	two eggs (0)	one egg (1)		
	S	Featherless chicks	no (0)	yes (1)		