Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

0.1 Member State	**IT**
0.2.1 Species code	**1353**
0.2.2 Species name	**Canis aureus**
0.2.3 Alternative species scientific name	N/A
0.2.4 Common name	N/A

1. National Level

1.1 Maps

1.1.1 Distribution Map	Yes
1.1.1a Sensitive species	No
1.1.2 Method used - map	Estimate based on expert opinion with no or minimal sampling (1)
1.1.3 Year or period	2001-2012
1.1.4 Additional map	No
1.1.5 Range map	Yes

2. Biogeographical Or Marine Level

2.1 Biogeographical Region	**Continental (CON)**
2.2 Published sources	The present species assessment (fields 0.1-2.9) has been compiled by Daniele Paoloni, Cristiano Spilinga (Associazione Teriologica Italiana - ATIt) and Anna Alonzi, Piero Genovesi, Francesca Ronchi (Institute for Environmental Protection and Research - ISPRA). Information, unpublished data and experts' judgments have been provided by Marco Apollonio, Luigi Boitani, Paolo Ciucci, Luca Lapini, Anna Loy, Andrea Sforzi (ATIt).

Boitani L., Corsi F., Falcucci A., Maiorano L., Marzetti I., Masi M., Montemaggiori A., Ottaviani D., Reggiani G., Rondinini C., 2002. Rete Ecologica Nazionale. Un approccio alla conservazione dei vertebrati italiani. Università di Roma "La Sapienza", Dipartimento di Biologia Animale e dell'Uomo; Ministero dell'Ambiente, Direzione per la Conservazione della Natura; Istituto di Ecologia Applicata. Http://www.gisbau.uniroma1.it/REN

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Lapini L., Molinari P., Dorigo L., Are G., Beraldo P., 2009. Reproduction of the Golden Jackal (Canis aureus moreoticus I. Geoffroy Saint Hilaire, 1835) in Julian Pre-Alps, with new data on its range-expansion in the High-Adriatic Hinterland (Mammalia, Carnivora, Canidae). Boll. Mus. Civ. St. nat. Venezia, 60 (2009):169-186.

Museo Friulano di Storia Naturale (Udine), Novembre 2011. Lo stato di conoscenza e di conservazione di alcune specie animali di interesse comunitario in Friuli Venezia Giulia.

2.3 Range

Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

2.3.1 Surface area - Range (km²)	1300
2.3.2 Method - Range surface area	Estimate based on partial data with some extrapolation and/or modelling (2)
2.3.3 Short-term trend period	2001-2012
2.3.4 Short-term trend direction	increase (+)
2.3.5 Short-term trend magnitude	min max
2.3.6 Long-term trend period	1989-2012
2.3.7 Long-term trend direction	increase (+)
2.3.8 Long-term trend magnitude	min max
2.3.9 Favourable reference range	area (km²)
	operator approximately equal to (≈)
	unkown No
	method Expert judgement
2.3.10 Reason for change	Genuine Improved knowledge/more accurate dataUse of different method

2.4 Population

2.4.1 Population size (individuals or agreed exception)	Unit number of individuals (i)
	min 5 max 10
2.4.2 Population size (other than individuals)	Unit N/A
	min max
2.4.3 Additional information	Definition of locality
	Conversion method
	Problems
2.4.4 Year or period	2001-2012
2.4.5 Method – population size	Estimate based on partial data with some extrapolation and/or modelling (2)
2.4.6 Short-term trend period	2001-2012
2.4.7 Short term trend direction	increase (+)
2.4.8 Short-term trend magnitude	min max confidence interval
2.4.9 Short-term trend method	Estimate based on partial data with some extrapolation and/or modelling (2)
2.4.10 Long-term trend period	1989-2012
2.4.11 Long term trend direction	increase (+)
2.4.12 Long-term trend magnitude	min max confidence interval
2.4.13 Long-term trend method	N/A
2.4.14 Favourable reference population	number
	operator approximately equal to (≈)
	unknown No
	method Expert judgement
2.4.15 Reason for change	Genuine Improved knowledge/more accurate data Use of different method

2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km²)	
2.5.2 Year or period	
2.5.3 Method used - habitat	Absent data (0)
2.5.4 a) Quality of habitat	Good
2.5.4 b) Quality of habitat - method	Expert based
2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	stable (0)
2.5.7 Long-term trend period	
2.5.8 Long term trend direction	N/A

2.5.9 Area of suitable habitat (km²)	425
2.5.10 Reason for change	Use of different method

2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
trapping, poisoning, poaching (F03.02.03)	medium importance (M)	N/A
Hunting (F03.01)	medium importance (M)	N/A
abandonment of pastoral systems, lack of grazing (A04.03)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A

2.6.1 Method used – pressures	based only on expert judgements (1)

2.7 Main Threats

Threat	ranking	pollution qualifier(s)
trapping, poisoning, poaching (F03.02.03)	medium importance (M)	N/A
Hunting (F03.01)	medium importance (M)	N/A
abandonment of pastoral systems, lack of grazing (A04.03)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A

2.7.1 Method used – threats	expert opinion (1)

2.8 Complementary Information

2.8.1 Justification of % thresholds for trends	
2.8.2 Other relevant Information	The Italian population of Canis aureus originates and is in a strong connection with the Balkan ones. The main conservation problems for the species in Italy are surely related to road mortality and to erroneous killings due to misidentifications during fox cullings. (Source: Lapini L., Conte D., Zupan M., Kozlan L., 2011. Italian jackals 1984-2011. An updated review (Canis aureus: Carnivora, Canidae). Boll. Mus. Civ. St. Nat. Venezia, 62.)
2.8.3 Trans-boundary assessment	

2.9 Conclusions (assessment of conservation status at end of reporting period)

2.9.1 Range	assessment	Favourable (FV)
	qualifiers	N/A
2.9.2. Population	assessment	Favourable (FV)
	qualifiers	N/A
2.9.3. Habitat	assessment	Favourable (FV)
	qualifiers	N/A
2.9.4. Future prospects	assessment	Favourable (FV)
	qualifiers	N/A
2.9.5 Overall assessment of Conservation Status	Favourable (FV)	
2.9.5 Overall trend in Conservation Status	N/A	

3. Natura 2000 coverage and conservation measures - Annex II species

Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

3.1 Population

3.1.1 Population Size	Unit	N/A
	min	max
3.1.2 Method used	N/A	
3.1.3 Trend of population size within	N/A	

3.2 Conversation Measures

2. Biogeographical Or Marine Level

2.1 Biogeographical Region
2.2 Published sources

Alpine (ALP)

The present species assessment (fields 0.1-2.9) has been compiled by Daniele Paoloni, Cristiano Spilinga (Associazione Teriologica Italiana - ATIt) and Anna Alonzi, Piero Genovesi, Francesca Ronchi (Institute for Environmental Protection and Research - ISPRA). Information, unpublished data and experts' judgments have been provided by Marco Apollonio, Luigi Boitani, Paolo Ciucci, Luca Lapini, Anna Loy, Andrea Sforzi (ATIt).

Boitani L., Corsi F., Falcucci A., Maiorano L., Marzetti I., Masi M., Montemaggiori A., Ottaviani D., Reggiani G., Rondinini C., 2002. Rete Ecologica Nazionale. Un approccio alla conservazione dei vertebrati italiani. Università di Roma "La Sapienza", Dipartimento di Biologia Animale e dell'Uomo; Ministero dell'Ambiente, Direzione per la Conservazione della Natura; Istituto di Ecologia Applicata. Http://www.gisbau.uniroma1.it/REN

Boitani L., Lovari S., Vigna Taglianti A., 2003. Carnivora – Artiodactyla. Fauna d'Italia, vol. XXXVIII, Mammalia III. Ed. Calderini de Il Sole 24 ore Edagricole, Bologna.

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2.3 Range

2.3.1 Surface area - Range (km²)	1600
2.3.2 Method - Range surface area	Estimate based on partial data with some extrapolation and/or modelling (2)
2.3.3 Short-term trend period	2001-2012
2.3.4 Short-term trend direction	increase (+)
2.3.5 Short-term trend magnitude	min max
2.3.6 Long-term trend period	1989-2012

Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

2.3.7 Long-term trend direction	increase (+)	
2.3.8 Long-term trend magnitude	min	max
2.3.9 Favourable reference range	area (km²)	
	operator	approximately equal to (≈)
	unkown	No
	method	Expert judgement
2.3.10 Reason for change	Genuine Improved knowledge/more accurate dataUse of different method	

2.4 Population

2.4.1 Population size (individuals or agreed exception)	Unit	number of individuals (i)		
	min	10	max	30
2.4.2 Population size (other than individuals)	Unit	N/A		
	min		max	
2.4.3 Additional information	Definition of locality			
	Conversion method			
	Problems			
2.4.4 Year or period	2001-2012			
2.4.5 Method – population size	Estimate based on partial data with some extrapolation and/or modelling (2)			
2.4.6 Short-term trend period	2001-2012			
2.4.7 Short term trend direction	increase (+)			
2.4.8 Short-term trend magnitude	min	max	confidence interval	
2.4.9 Short-term trend method	Estimate based on partial data with some extrapolation and/or modelling (2)			
2.4.10 Long-term trend period	1989-2012			
2.4.11 Long term trend direction	increase (+)			
2.4.12 Long-term trend magnitude	min	max	confidence interval	
2.4.13 Long-term trend method	N/A			
2.4.14 Favourable reference population	number			
	operator	approximately equal to (≈)		
	unknown	No		
	method	Expert judgement		
2.4.15 Reason for change	Genuine Improved knowledge/more accurate data Use of different method			

2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km²)	
2.5.2 Year or period	
2.5.3 Method used - habitat	Absent data (0)
2.5.4 a) Quality of habitat	Good
2.5.4 b) Quality of habitat - method	Expert based
2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	stable (0)
2.5.7 Long-term trend period	
2.5.8 Long term trend direction	N/A
2.5.9 Area of suitable habitat (km²)	62
2.5.10 Reason for change	Use of different method

2.6 Main Pressures

Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

Pressure	ranking	pollution qualifier(s)
trapping, poisoning, poaching (F03.02.03)	medium importance (M)	N/A
Hunting (F03.01)	medium importance (M)	N/A
abandonment of pastoral systems, lack of grazing (A04.03)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A

2.6.1 Method used – pressures	based only on expert judgements (1)

2.7 Main Threats

Threat	ranking	pollution qualifier(s)
trapping, poisoning, poaching (F03.02.03)	medium importance (M)	N/A
Hunting (F03.01)	medium importance (M)	N/A
abandonment of pastoral systems, lack of grazing (A04.03)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A

2.7.1 Method used – threats	expert opinion (1)

2.8 Complementary Information

2.8.1 Justification of % thresholds for trends	
2.8.2 Other relevant Information	The Italian population of Canis aureus originates and is in a strong connection with the Balkan ones.

The main conservation problems for the species in Italy are surely related to road mortality and to erroneous killings due to misidentifications during fox cullings. (Source: Lapini L., Conte D., Zupan M., Kozlan L., 2011. Italian jackals 1984-2011. An updated review (Canis aureus: Carnivora, Canidae). Boll. Mus. Civ. St. Nat. Venezia, 62.) |
| 2.8.3 Trans-boundary assessment | |

2.9 Conclusions (assessment of conservation status at end of reporting period)

2.9.1 Range	assessment Favourable (FV)
	qualifiers N/A
2.9.2. Population	assessment Favourable (FV)
	qualifiers N/A
2.9.3. Habitat	assessment Favourable (FV)
	qualifiers N/A
2.9.4. Future prospects	assessment Favourable (FV)
	qualifiers N/A
2.9.5 Overall assessment of Conservation Status	Favourable (FV)
2.9.5 Overall trend in Conservation Status	N/A

3. Natura 2000 coverage and conservation measures - Annex II species

3.1 Population

3.1.1 Population Size	Unit	N/A
	min	max

Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

3.1.2 Method used	N/A
3.1.3 Trend of population size within	N/A

3.2 Conversation Measures

Notes

Species name: Canis aureus (1353) Region code: ALP

Field label	Note	User
2.5.9 Area of suitable habitat (km2)	The area of suitable habitat (2.5.9) has been calculated by intersecting habitat suitability models with each biogeographical region in which the species is present. The habitat suitability models are those included in the Italian Ecological Network (Rete Ecologica Nazionale – REN; Boitani et al. 2002), and were developed at the national scale for all vertebrate species, based on species-environments relationships defined with inputs from leading species' experts. The models were created integrating into a Geographic Information System geographic and environmental data, such as Corine Land Cover, Digital Terrain Model, water and road networks. Source: Boitani L., Corsi F., Falcucci A., Maiorano L., Marzetti I., Masi M., Montemaggiori A., Ottaviani D., Reggiani G., Rondinini C., 2002. Rete Ecologica Nazionale. Un approccio alla conservazione dei vertebrati italiani. Università di Roma "La Sapienza", Dipartimento di Biologia Animale e dell'Uomo; Ministero dell'Ambiente, Direzione per la Conservazione della Natura; Istituto di Ecologia Applicata. Http://www.gisbau.uniroma1.it/REN	ISPRA_AUNA

Species name: Canis aureus (1353) Region code: CON

Field label	Note	User
2.5.9 Area of suitable habitat (km2)	The area of suitable habitat (2.5.9) has been calculated by intersecting habitat suitability models with each biogeographical region in which the species is present. The habitat suitability models are those included in the Italian Ecological Network (Rete Ecologica Nazionale – REN; Boitani et al. 2002), and were developed at the national scale for all vertebrate species, based on species-environments relationships defined with inputs from leading species' experts. The models were created integrating into a Geographic Information System geographic and environmental data, such as Corine Land Cover, Digital Terrain Model, water and road networks. Source: Boitani L., Corsi F., Falcucci A., Maiorano L., Marzetti I., Masi M., Montemaggiori A., Ottaviani D., Reggiani G., Rondinini C., 2002. Rete Ecologica Nazionale. Un approccio alla conservazione dei vertebrati italiani. Università di Roma "La Sapienza", Dipartimento di Biologia Animale e dell'Uomo; Ministero dell'Ambiente, Direzione per la Conservazione della Natura; Istituto di Ecologia Applicata. Http://www.gisbau.uniroma1.it/REN	ISPRA_AUNA

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