



INTERNATIONAL
BEARDED VULTURE
MONITORING

IBM Protocols:

Ringling Scheme for wild born Bearded Vultures in the Alps

1) Introduction:

In the last years the need for ringling of wild born Bearded Vultures in the nest has been discussed (see Protocol “Nest climbing and marking of nestlings in the wild”). In the IBM Steering Committee 2012 in Goldau, CH, it has been decided to ring the birds of the release 2013 in Grands Causses with a regular ring of the Project (Aluminium) and one Darvic ring. This kind of ring should be used for the nestlings in the wild for the future. Additionally it should be tried for the first time to ring a wild born Bearded Vulture in the region of Haute Savoie in 2013. Therefore it was necessary to set up a new scheme for the ringling of the future years. First of all the new Darvic rings should be used for wild born birds and the usual aluminium rings should still be used for released birds in the coming years, but the possibility to include released birds in the new ringling scheme has to be considered.

2) New ringling scheme

ATTENTION:

The new ring type (“second ring”) is used for both released and birds born in nature. Whereas for released birds the coded ring shall be fitted on the right leg (left leg colour ring with BG number) the birds born in nature shall have the coded ring on the left leg!

	Right leg	Left leg
Released birds	Coded ring	Colour ring with BG number
Birds born in nature	Official ring (museum, ornithological station etc.)	Coded ring



First Ring

Released birds - Determination of the Alpine/Corridor Region:

In the IBM the 5 geographical regions have been defined for the analysis of observation and reproduction data. These 5 regions have to be distinguished in the new scheme. Therefore 5 different colours should be used.

The proposal for the colours of the regions is:

Corridor region:	white (with engraved address)
South-Western:	red (with engraved address)
North-Western:	black (with engraved address)
Central:	blue (with engraved address)
Eastern:	yellow (with engraved address)

Each of these rings should additionally have engraved BG number and contact address.

Birds born in nature:

In case birds born in nature will be banded the national bird ringing scheme has to be considered. Thus such birds will be equipped with a national bird ring instead of the colour ring giving information about the region. Region or Territory specific information thus has to be included on the second ring.

Second Ring

We suggest to use a triple code running from down upwards (see figure 1).

We propose to use clearly distinguishable letters only. Therefore the following letters / numbers are skipped from our ringing program (preliminary selection):

B,C,D,F,G,I,Q,R,S,W,Y and Z



List of codes for the new ringing scheme starting 2014

<i>Number of combinations</i>	<i>Year e.g. "1" for 2014</i>	<i>1</i>
1	First lower position (Age)	1
2	Second lower Position (identity)	1
3		2
4		3
5		4
6		5
7		6
8		7
9		8
10		9
		0
11		A
12		B
13		C
14		D
15		E
16		F
17		G
18		H
19		I
20		J
21		K
22		L
23		M
24		N
25		P
26		Q
27		R
28		S
29		T
30		U
31		V
32		W
33		X
34		Y
35		Z
36		+
37		-
38		#
39		\$
40	Third position (released =1/wild born=0)	1
41		0



Figure 2 shows the aluminium ring with engraved codes. This kind of ring is the envisaged product we recommend for the project however, coding needs to be a triple and thus should run from bottom upwards. Grey codes are thought to be the best for proper identification, yellow intermediate and codes with white back layer shall be avoided if not needed.



a) First (lower) code position - Determination of bird age (year):

The lowest, first position of the triple code is used to identify the age of the bird. This information is extraordinary important in terms of demographic studies. The lowest code is better readable than the upper ones (which are more easily covered by feathers). **Therefore it is important to put the ring upright on the leg of the bird. The code must be readable from down upwards!**

Starting from 2014 we will use the following coding 1-9 and afterwards pre-selected letters from the alphabet (in total about 30 years).

b) Second position - Determination of identity:

The second code position serves to identify the bird. The codes can be assigned e.g. a certain territory / release site. The coding is used twice, once for birds released and once for birds born in nature. Only in the third position those two types are differentiated. Using numbers and letters this ringing scheme offers the possibility to differentiate between roughly 30 birds / locations. The coding starts with 1-9 and continues with A-Z.

c) Third position - Determination of bird type (released versus wild born):

The third coding position can be used for the information whether a bird was released or born in the wild. This position can be seen least because of the coverage by feathers. However, even if the third code can't be seen only two options remain (one released and another wild born bird). We propose to use the letter "R" for released birds and "N" for birds born in nature.

ATTENTION:

The new ring type is used for both released and birds born in nature. Whereas for released birds the coded ring shall be fitted on the right leg (left leg colour ring with BG number) the birds born in nature shall have the coded ring on the left leg!

	Right leg	Left leg
Released birds	Coded ring	Colour ring with BG number
Birds born in nature	Official ring (museum, ornithological station etc.)	Coded ring

