

# **STUDBOOK BREEDING PROGRAMME**

## ***Cuora flavomarginata*** yellow margined boxturtle



**Photo: Mark Klerks**

**ANNUAL REPORT 2003**

## 1. Introduction and activities in 2003.

During 2003 all studbookparticipants were contacted to obtain their emailaddresses and to give them a personal signal from the studbook. Also the question was asked if they still would like to participate in the studbook. This last question is essential since the communication of the participants is very low. Also there is not much communication from new possible participants and if so mainly to obtain new animals. During 2003 nothing is published within the studbook. The publication of the Viennasymposium is still not published.

In 2003 an experiment is done on two locations. Because of a huge breedingsucces (7 hatchlings) at one location after the start to keep animals outside during the summer of 2002 and an declining breedingsucces at one location we decided to keep two groups outside. The animals were placed outside on exactly the same day and were transfered towards the indoor enclosure on the same day. Unfortunately this experiment did not work well because not much eggs were laid and most are infertile. This may be due the extreme hot summer in 2003. Tranfering animals towards new enclosures may result in to much stress, this resulting into a lower reproductivity. At the moment some fertile eggs are still incubating.

## 2. Studbook population.

The studbook population seems to be healthy and hardy. Many specimens are already in the studbook for many years and the deathnumber is quit low. The species is toltant toward different keepingmethods and doesn't need much space to be kept healty.

| Stud # | Sex | Hatch Date   | Sire   | Dam    | Location               | Date                         | Local ID   | Event             | Birth-Origin |
|--------|-----|--------------|--------|--------|------------------------|------------------------------|------------|-------------------|--------------|
| 000001 | F   | 1 Feb 1980   |        |        | LOC_00001              | ????                         | UNK        | Transfer          | Unk Birth    |
| 000002 | M   | ????         | WILD   | WILD   | LOC_00001              | ????                         | UNK        | Transfer          | Wild Born    |
| 000003 | M   | ~ 1982       | WILD   | WILD   | LOC_00001              | ????                         | UNK        | Transfer          | Wild Born    |
| 000004 | M   | ~ 1981       | WILD   | WILD   | LOC_00001              | ????                         | UNK        | Transfer          | Wild Born    |
| 000005 | F   | ????         | WILD   | WILD   | LOC_00001              | ~27 Jul 1982                 | UNK        | Transfer          | Wild Born    |
| 000006 | M   | ~ 1983       | WILD   | WILD   | LOC_00001              | ????                         | UNK        | Transfer          | Wild Born    |
| 000007 | F   | ~10 Jul 1984 | 000003 | 000005 | LOC_00001              | ~10 Jul 1984                 | UNK        | Hatch             | Captive Born |
| 000008 | F   | ????         | WILD   | WILD   | LOC_00001              | ????                         | UNK        | Transfer          | Wild Born    |
| 000009 | F   | ~ 9 Aug 1985 | 000003 | 000005 | LOC_00001              | ~ 9 Aug 1985                 | UNK        | Hatch             | Captive Born |
| 000010 | F   | ~ 2 Apr 1983 | 000003 | 000005 | LOC_00001              | ~ 2 Apr 1983<br>~ 1 Jan 1994 | UNK        | Hatch<br>Death    | Captive Born |
| 000011 | F   | ~ 3 Jun 1984 | 000003 | 000005 | LOC_00001              | ~ 3 Jun 1984<br>~ 1 Jan 1994 | UNK        | Hatch<br>Death    | Captive Born |
| 000012 | F   | ~ 1990       |        |        | LOC_00016              | 1 Aug 1998                   | UNK        | Transfer          | Captive Born |
| 000013 | F   | 1 Jan 1990   |        |        | LOC_00016              | 1 Aug 1998                   | UNK        | Transfer          | Captive Born |
| 000014 | M   | ~ 1990       | WILD   | WILD   | LOC_00005              | 10 Apr 1996                  | UNK        | Transfer          | Wild Born    |
| 000015 | M   | ~ 1990       | WILD   | WILD   | LOC_00016              | 1 Aug 1998                   | UNK        | Transfer          | Wild Born    |
| 000016 | F   | ~23 Aug 1998 | 000003 | 000005 | LOC_00001<br>LOC_00016 | ~23 Aug 1998<br>~ 1 Sep 1998 | UNK<br>UNK | Hatch<br>Transfer | Captive Born |
| 000017 | M   | ????         | WILD   | WILD   | LOC_00012              | 1 Dec 1994                   | UNK        | Transfer          | Wild Born    |
| 000018 | M   | 1 Jan 1990   | WILD   | WILD   | LOC_00005              | 1 Jan 1990                   | UNK        | Transfer          | Wild Born    |
| 000019 | F   | 1 Jan 1900   | WILD   | WILD   | LOC_00005              | 1 Jan 1990                   | UNK        | Transfer          | Wild Born    |

|        |   |              |        |        |                        |                              |            |                      |              |
|--------|---|--------------|--------|--------|------------------------|------------------------------|------------|----------------------|--------------|
| 000020 | M | 1 Jan 1994   | WILD   | WILD   | LOC_00014              | 1 Jan 1994                   | UNK        | Transfer             | Wild Born    |
| 000021 | F | 1 Jan 1994   | WILD   | WILD   | LOC_00014              | 1 Jan 1994                   | UNK        | Transfer             | Wild Born    |
| 000022 | M | 1 Jan 1994   | WILD   | WILD   | LOC_00013              | 14 Aug 1994                  | UNK        | Transfer             | Wild Born    |
| 000023 | F | ~ 1 Jan 1994 | 000002 | 000007 | LOC_00001<br>LOC_00006 | ~ 1 Jan 1994<br>~ 6 Jul 1994 | UNK<br>UNK | Hatch<br>Transfer    | Captive Born |
| 000024 | ? | ~19 Apr 1992 | 000002 | 000010 | LOC_00001<br>LOC_00006 | ~19 Apr 1992<br>6 Jul 1992   | UNK<br>UNK | Hatch<br>Transfer    | Captive Born |
| 000025 | M | ~ 1990       | WILD   | WILD   | LOC_00006              | 1 Jan 1994                   | UNK        | Transfer             | Wild Born    |
| 000026 | F | ~ 1990       | WILD   | WILD   | LOC_00006              | 1 Jan 1994                   | UNK        | Transfer             | Wild Born    |
| 000027 | ? | ~ 6 Jul 1993 | 000025 | 000026 | LOC_00006              | ~ 6 Jul 1993                 | UNK        | Hatch                | Captive Born |
| 000028 | ? | ~13 Jun 1994 | 000025 | 000026 | LOC_00006              | ~13 Jun 1994                 | UNK        | Hatch                | Captive Born |
| 000029 | ? | ~26 Jul 1994 | 000025 | 000026 | LOC_00006              | ~26 Jul 1994                 | UNK        | Hatch                | Captive Born |
| 000030 | F | ~ 1994       | WILD   | WILD   | LOC_00012              | ~14 Nov 1994                 | UNK        | Transfer             | Wild Born    |
| 000031 | M | ~31 Dec 1994 | WILD   | WILD   | LOC_00013              | 31 Dec 1994                  | UNK        | Transfer             | Wild Born    |
| 000032 | F | ~31 Dec 1994 | WILD   | WILD   | LOC_00013              | ~31 Dec 1994                 | UNK        | Transfer             | Wild Born    |
| 000033 | F | 1 Jan 1985   | WILD   | WILD   | LOC_00007<br>LOC_00002 | ~ 1 Jan 1985<br>~24 Nov 1998 | UNK<br>UNK | Transfer<br>Transfer | Wild Born    |
| 000034 | F | 1 Jan 1985   | WILD   | WILD   | LOC_00007<br>LOC_00002 | ~ 1 Jan 1985<br>~24 Nov 1998 | UNK<br>UNK | Transfer<br>Transfer | Wild Born    |
| 000035 | F | ~ 1987       | WILD   | WILD   | LOC_00007<br>LOC_00008 | ~ 1 Jan 1987<br>1 Dec 1998   | UNK<br>UNK | Transfer<br>Transfer | Wild Born    |
| 000036 | M | ~ 1987       | WILD   | WILD   | LOC_00007<br>LOC_00008 | ~ 1 Jan 1987<br>~ 1 Dec 1998 | UNK<br>UNK | Transfer<br>Transfer | Wild Born    |
| 000037 | F | ~12 Mar 1989 | UNK    | 000033 | LOC_00007<br>LOC_00009 | ~12 Mar 1989<br>~17 Mar 1997 | UNK<br>UNK | Hatch<br>Transfer    | Captive Born |
| 000038 | F | ~12 Mar 1989 | UNK    | 000033 | LOC_00007<br>LOC_00009 | ~12 Mar 1989<br>~17 Mar 1997 | UNK<br>UNK | Hatch<br>Transfer    | Captive Born |
| 000039 | ? | ~25 Jun 1995 | 000022 | 000032 | LOC_00013              | ~25 Jun 1995                 | UNK        | Hatch                | Captive Born |
| 000040 | ? | ~14 Jul 1995 | 000022 | 000032 | LOC_00013              | ~14 Jul 1995                 | UNK        | Hatch                | Captive Born |
| 000041 | M | ~ 1996       | WILD   | WILD   | LOC_00006              | 8 May 1996                   | UNK        | Transfer             | Wild Born    |
| 000042 | F | ~ 1996       | WILD   | WILD   | LOC_00006              | 8 May 1996                   | UNK        | Transfer             | Wild Born    |
| 000043 | M | ~ 1996       | WILD   | WILD   | LOC_00002              | 23 Jun 1996                  | UNK        | Transfer             | Wild Born    |
| 000044 | M | ~ 1990       | WILD   | WILD   | LOC_00002<br>LOC_00003 | 23 Jun 1996<br>~ Aug 2002    | UNK<br>UNK | Transfer<br>Transfer | Wild Born    |
| 000045 | M | ~ 1996       | WILD   | WILD   | LOC_00002<br>LOC_00003 | 2 Nov 1996<br>~ Sep 2002     | UNK<br>UNK | Transfer<br>Transfer | Wild Born    |
| 000046 | M | ~ 1990       | WILD   | WILD   | LOC_00002              | 23 Jun 1996                  | UNK        | Transfer             | Wild Born    |
| 000047 | M | ~11 Jul 1997 | WILD   | WILD   | LOC_00014              | 11 Jul 1997                  | UNK        | Transfer             | Wild Born    |
| 000048 | F | ~11 Jul 1997 | WILD   | WILD   | LOC_00014              | ~11 Jul 1997                 | UNK        | Transfer             | Wild Born    |
| 000049 | M | ~ 1990       | WILD   | WILD   | LOC_00011              | 1 Jan 1998                   | UNK        | Transfer             | Wild Born    |
| 000050 | M | ~ 1998       | WILD   | WILD   | LOC_00011              | 1 Jan 1998                   | UNK        | Transfer             | Wild Born    |
| 000051 | M | ~ 1998       | WILD   | WILD   | LOC_00011              | 1 Jan 1998                   | UNK        | Transfer             | Wild Born    |
| 000052 | F | ~ 1990       | WILD   | WILD   | LOC_00011              | 1 Jan 1998                   | UNK        | Transfer             | Wild Born    |
| 000053 | F | ~ 1998       | WILD   | WILD   | LOC_00011              | 1 Jan 1998                   | UNK        | Transfer             | Wild Born    |
| 000054 | F | ~ 1998       | WILD   | WILD   | LOC_00011              | 1 Jan 1998                   | UNK        | Transfer             | Wild Born    |
| 000055 | ? | ~ 1 Sep 1995 | 000049 | 000052 | LOC_00011              | ~ 1 Sep 1995                 | UNK        | Hatch                | Captive Born |

|                       |   |              |      |        |                                     |  |                   |                               |              |
|-----------------------|---|--------------|------|--------|-------------------------------------|--|-------------------|-------------------------------|--------------|
|                       |   |              |      |        |                                     | 1 Jan 1998                               | UNK               | Transfer                      |              |
| 000056                | F | ~ 1998       | WILD | WILD   | LOC_00001<br>LOC_00002              | ~ Feb 1998<br>27 May 1998                | UNK<br>UNK        | Transfer<br>Transfer          | Wild Born    |
| 000057                | M | ~ Feb 1998   | WILD | WILD   | LOC_00001<br>LOC_00010              | ~ Feb 1998<br>7 Feb 1998                 | UNK<br>UNK        | Transfer<br>Transfer          | Wild Born    |
| 000058                | F | ~ Feb 1998   | WILD | WILD   | LOC_00001<br>LOC_00010              | ~ Feb 1998<br>~ 7 Feb 1998               | UNK<br>UNK        | Transfer<br>Transfer          | Wild Born    |
| 000059                | M | 1 Jan 1998   | WILD | WILD   | LOC_00016                           | 1 Aug 1998                               | UNK               | Transfer                      | Wild Born    |
| 000060                | F | 1 Jan 1998   | WILD | WILD   | LOC_00016                           | 1 Aug 1998                               | UNK               | Transfer                      | Wild Born    |
| 000061                | F | ~ 1990       | WILD | WILD   | LOC_00001<br>LOC_00002              | ~ Sep 1998<br>~ Oct 1998                 | UNK<br>UNK        | Transfer<br>Transfer          | Wild Born    |
| 000062                | M | ~ 1990       | WILD | WILD   | LOC_00001<br>LOC_00002              | ~ Sep 1998<br>~ Oct 1998                 | UNK<br>UNK        | Transfer<br>Transfer          | Wild Born    |
| 000063                | F | ~ 1990       | WILD | WILD   | LOC_00003                           | ~ 2000                                   | UNK               | Transfer                      | Wild Born    |
| 000064                | F | ~ 1990       | WILD | WILD   | LOC_00003                           | ~ 2000                                   | UNK               | Transfer                      | Wild Born    |
| 000065                | F | ~ 1990       | WILD | WILD   | LOC_00003                           | ~ 2000                                   | UNK               | Transfer                      | Wild Born    |
| 000066                | M | ~ 1990       | WILD | WILD   | LOC_00003                           | ~ 2000                                   | UNK               | Transfer                      | Wild Born    |
| 000067                | ? | ~ Jan 2000   | UNK  | UNK    | LOC_00017<br>LOC_00003              | ~ Jan 2000<br>~ Jan 2003                 | UNK<br>UNK        | Hatch<br>Transfer             | Captive Born |
| 000068                | ? | ~ Jan 2000   | UNK  | UNK    | LOC_00017<br>LOC_00003              | ~ Jan 2000<br>~ Jan 2003                 | UNK<br>UNK        | Hatch<br>Transfer             | Captive Born |
| 000069                | ? | ~15 Apr 2000 | MULT | 000033 | LOC_00002<br>LOC_00017<br>LOC_00003 | ~15 Apr 2000<br>~ Aug 2000<br>~ Jan 2003 | UNK<br>UNK<br>UNK | Hatch<br>Transfer<br>Transfer | Captive Born |
| 000070                | ? | ~15 Apr 2000 | MULT | 000033 | LOC_00002<br>LOC_00017<br>LOC_00003 | ~15 Apr 2000<br>~ Sep 2000<br>~ Jan 2003 | UNK<br>UNK<br>UNK | Hatch<br>Transfer<br>Transfer | Captive Born |
| 000071                | ? | ~ 1990       | WILD | WILD   | LOC_00018                           | ~ 1 May 1999                             | UNK               | Transfer                      | Wild Born    |
| 000072                | ? | ~ 1990       | WILD | WILD   | LOC_00018                           | ~ 1 May 1999                             | UNK               | Transfer                      | Wild Born    |
| 000073                | ? | 24 Aug 2003  | UNK  | UNK    | LOC_00003                           | 24 Aug 2003                              | UNK               | Hatch                         | Captive Born |
| 000074                | ? | 24 Aug 2003  | UNK  | UNK    | LOC_00003                           | 24 Aug 2003                              | UNK               | Hatch                         | Captive Born |
| 000075<br>Type        | ? | 12 Jan 2003  | UNK  | UNK    | LOC_00003                           | 12 Jan 2003                              | UNK               | Hatch                         | Unk Birth    |
| 000076<br>Type        | ? | 12 Jan 2003  | UNK  | UNK    | LOC_00003                           | 12 Jan 2003                              | UNK               | Hatch                         | Unk Birth    |
| =====                 |   |              |      |        |                                     |  |                   |                               |              |
| TOTALS: 26.33.17 (76) |   |              |      |        |                                     |  |                   |                               |              |

### 3. Locations.

No additional locations were added during 2003

#### Locations: LOC\_00001/

| Stud #<br>Name | Sex | Hatch Date<br>Breeder # | Sire | Dam  | Location  | Date         | Local ID | Event    | Birth-Origin |
|----------------|-----|-------------------------|------|------|-----------|--------------|----------|----------|--------------|
| 000001<br>Type | F   | 1 Feb 1980              |      |      | LOC_00001 | ????         | UNK      | Transfer | Unk Birth    |
| 000002         | M   | ????                    | WILD | WILD | LOC_00001 | ????         | UNK      | Transfer | Wild Born    |
| 000003         | M   | ~ 1982                  | WILD | WILD | LOC_00001 | ????         | UNK      | Transfer | Wild Born    |
| 000004         | M   | ~ 1981                  | WILD | WILD | LOC_00001 | ????         | UNK      | Transfer | Wild Born    |
| 000005         | F   | ????                    | WILD | WILD | LOC_00001 | ~27 Jul 1982 | UNK      | Transfer | Wild Born    |

|   |   |              |        |        |           |                              |     |                |              |
|---|---|--------------|--------|--------|-----------|------------------------------|-----|----------------|--------------|
| 000006  | M | ~ 1983       | WILD   | WILD   | LOC_00001 | ????                         | UNK | Transfer       | Wild Born    |
| 000007  | F | ~10 Jul 1984 | 000003 | 000005 | LOC_00001 | ~10 Jul 1984                 | UNK | Hatch          | Captive Born |
| 000008  | F | ????         | WILD   | WILD   | LOC_00001 | ????                         | UNK | Transfer       | Wild Born    |
| 000009  | F | ~ 9 Aug 1985 | 000003 | 000005 | LOC_00001 | ~ 9 Aug 1985                 | UNK | Hatch          | Captive Born |
| 000010  | F | ~ 2 Apr 1983 | 000003 | 000005 | LOC_00001 | ~ 2 Apr 1983<br>~ 1 Jan 1994 | UNK | Hatch<br>Death | Captive Born |
| [Death by: Other/Unknown Unknown Unknown (after Autopsy)] |   |              |        |        |           |                              |     |                |              |
| 000011  | F | ~ 3 Jun 1984 | 000003 | 000005 | LOC_00001 | ~ 3 Jun 1984<br>~ 1 Jan 1994 | UNK | Hatch<br>Death | Captive Born |
| [Death by: Other/Unknown Unknown Unknown (after Autopsy)] |   |              |        |        |           |                              |     |                |              |
| 000016  | F | ~23 Aug 1998 | 000003 | 000005 | LOC_00001 | ~23 Aug 1998                 | UNK | Hatch          | Captive Born |
|   |   |              |        |        | LOC_00016 | ~ 1 Sep 1998                 | UNK | Transfer       |              |
| 000023  | F | ~ 1 Jan 1994 | 000002 | 000007 | LOC_00001 | ~ 1 Jan 1994                 | UNK | Hatch          | Captive Born |
|   |   |              |        |        | LOC_00006 | ~ 6 Jul 1994                 | UNK | Transfer       |              |
| 000024  | ? | ~19 Apr 1992 | 000002 | 000010 | LOC_00001 | ~19 Apr 1992                 | UNK | Hatch          | Captive Born |
|   |   |              |        |        | LOC_00006 | 6 Jul 1992                   | UNK | Transfer       |              |
| 000056  | F | ~ 1998       | WILD   | WILD   | LOC_00001 | ~ Feb 1998                   | UNK | Transfer       | Wild Born    |
|   |   |              |        |        | LOC_00002 | 27 May 1998                  | UNK | Transfer       |              |
| 000057  | M | ~ Feb 1998   | WILD   | WILD   | LOC_00001 | ~ Feb 1998                   | UNK | Transfer       | Wild Born    |
|   |   |              |        |        | LOC_00010 | 7 Feb 1998                   | UNK | Transfer       |              |
| 000058  | F | ~ Feb 1998   | WILD   | WILD   | LOC_00001 | ~ Feb 1998                   | UNK | Transfer       | Wild Born    |
|   |   |              |        |        | LOC_00010 | ~ 7 Feb 1998                 | UNK | Transfer       |              |
| 000061  | F | ~ 1990       | WILD   | WILD   | LOC_00001 | ~ Sep 1998                   | UNK | Transfer       | Wild Born    |
|   |   |              |        |        | LOC_00002 | ~ Oct 1998                   | UNK | Transfer       |              |
| 000062  | M | ~ 1990       | WILD   | WILD   | LOC_00001 | ~ Sep 1998                   | UNK | Transfer       | Wild Born    |
|   |   |              |        |        | LOC_00002 | ~ Oct 1998                   | UNK | Transfer       |              |

Totals: 6.12.1 (19)

**Locations: LOC\_00002/**

| Stud # | Sex       | Hatch Date   | Sire | Dam    | Location  | Date         | Local ID | Event    | Birth-Origin |
|--------|-----------|--------------|------|--------|-----------|--------------|----------|----------|--------------|
| Name   | Breeder # |              |      |        |           |              |          |          |              |
| 000033 | F         | 1 Jan 1985   | WILD | WILD   | LOC_00007 | ~ 1 Jan 1985 | UNK      | Transfer | Wild Born    |
|        |           |              |      |        | LOC_00002 | ~24 Nov 1998 | UNK      | Transfer |              |
| 000034 | F         | 1 Jan 1985   | WILD | WILD   | LOC_00007 | ~ 1 Jan 1985 | UNK      | Transfer | Wild Born    |
|        |           |              |      |        | LOC_00002 | ~24 Nov 1998 | UNK      | Transfer |              |
| 000043 | M         | ~ 1996       | WILD | WILD   | LOC_00002 | 23 Jun 1996  | UNK      | Transfer | Wild Born    |
| 000044 | M         | ~ 1990       | WILD | WILD   | LOC_00002 | 23 Jun 1996  | UNK      | Transfer | Wild Born    |
|        |           |              |      |        | LOC_00003 | ~ Aug 2002   | UNK      | Transfer |              |
| 000045 | M         | ~ 1996       | WILD | WILD   | LOC_00002 | 2 Nov 1996   | UNK      | Transfer | Wild Born    |
|        |           |              |      |        | LOC_00003 | ~ Sep 2002   | UNK      | Transfer |              |
| 000046 | M         | ~ 1990       | WILD | WILD   | LOC_00002 | 23 Jun 1996  | UNK      | Transfer | Wild Born    |
| 000056 | F         | ~ 1998       | WILD | WILD   | LOC_00001 | ~ Feb 1998   | UNK      | Transfer | Wild Born    |
|        |           |              |      |        | LOC_00002 | 27 May 1998  | UNK      | Transfer |              |
| 000061 | F         | ~ 1990       | WILD | WILD   | LOC_00001 | ~ Sep 1998   | UNK      | Transfer | Wild Born    |
|        |           |              |      |        | LOC_00002 | ~ Oct 1998   | UNK      | Transfer |              |
| 000062 | M         | ~ 1990       | WILD | WILD   | LOC_00001 | ~ Sep 1998   | UNK      | Transfer | Wild Born    |
|        |           |              |      |        | LOC_00002 | ~ Oct 1998   | UNK      | Transfer |              |
| 000069 | ?         | ~15 Apr 2000 | MULT | 000033 | LOC_00002 | ~15 Apr 2000 | UNK      | Hatch    | Captive Born |
|        |           |              |      |        | LOC_00017 | ~ Aug 2000   | UNK      | Transfer |              |
|        |           |              |      |        | LOC_00003 | ~ Jan 2003   | UNK      | Transfer |              |
| 000070 | ?         | ~15 Apr 2000 | MULT | 000033 | LOC_00002 | ~15 Apr 2000 | UNK      | Hatch    | Captive Born |
|        |           |              |      |        | LOC_00017 | ~ Sep 2000   | UNK      | Transfer |              |
|        |           |              |      |        | LOC_00003 | ~ Jan 2003   | UNK      | Transfer |              |

Totals: 5.4.2 (11)

**Locations: LOC\_00003/**

| Stud # | Sex | Hatch Date   | Sire | Dam    | Location                            | Date                                     | Local ID          | Event                         | Birth-Origin |
|--------|-----|--------------|------|--------|-------------------------------------|--|-------------------|-------------------------------|--------------|
| 000044 | M   | ~ 1990       | WILD | WILD   | LOC_00002<br>LOC_00003              | 23 Jun 1996<br>~ Aug 2002                | UNK<br>UNK        | Transfer<br>Transfer          | Wild Born    |
| 000045 | M   | ~ 1996       | WILD | WILD   | LOC_00002<br>LOC_00003              | 2 Nov 1996<br>~ Sep 2002                 | UNK<br>UNK        | Transfer<br>Transfer          | Wild Born    |
| 000063 | F   | ~ 1990       | WILD | WILD   | LOC_00003                           | ~ 2000                                   | UNK               | Transfer                      | Wild Born    |
| 000064 | F   | ~ 1990       | WILD | WILD   | LOC_00003                           | ~ 2000                                   | UNK               | Transfer                      | Wild Born    |
| 000065 | F   | ~ 1990       | WILD | WILD   | LOC_00003                           | ~ 2000                                   | UNK               | Transfer                      | Wild Born    |
| 000066 | M   | ~ 1990       | WILD | WILD   | LOC_00003                           | ~ 2000                                   | UNK               | Transfer                      | Wild Born    |
| 000067 | ?   | ~ Jan 2000   | UNK  | UNK    | LOC_00017<br>LOC_00003              | ~ Jan 2000<br>~ Jan 2003                 | UNK<br>UNK        | Hatch<br>Transfer             | Captive Born |
| 000068 | ?   | ~ Jan 2000   | UNK  | UNK    | LOC_00017<br>LOC_00003              | ~ Jan 2000<br>~ Jan 2003                 | UNK<br>UNK        | Hatch<br>Transfer             | Captive Born |
| 000069 | ?   | ~15 Apr 2000 | MULT | 000033 | LOC_00002<br>LOC_00017<br>LOC_00003 | ~15 Apr 2000<br>~ Aug 2000<br>~ Jan 2003 | UNK<br>UNK<br>UNK | Hatch<br>Transfer<br>Transfer | Captive Born |
| 000070 | ?   | ~15 Apr 2000 | MULT | 000033 | LOC_00002<br>LOC_00017<br>LOC_00003 | ~15 Apr 2000<br>~ Sep 2000<br>~ Jan 2003 | UNK<br>UNK<br>UNK | Hatch<br>Transfer<br>Transfer | Captive Born |
| 000073 | ?   | 24 Aug 2003  | UNK  | UNK    | LOC_00003                           | 24 Aug 2003                              | UNK               | Hatch                         | Captive Born |
| 000074 | ?   | 24 Aug 2003  | UNK  | UNK    | LOC_00003                           | 24 Aug 2003                              | UNK               | Hatch                         | Captive Born |
| 000075 | ?   | 12 Jan 2003  | UNK  | UNK    | LOC_00003                           | 12 Jan 2003                              | UNK               | Hatch                         | Unk Birth    |
| 000076 | ?   | 12 Jan 2003  | UNK  | UNK    | LOC_00003                           | 12 Jan 2003                              | UNK               | Hatch                         | Unk Birth    |

Totals: 3.3.8 (14)

**Locations: LOC\_00005/**

| Stud # | Sex | Hatch Date | Sire | Dam  | Location  | Date        | Local ID | Event    | Birth-Origin |
|--------|-----|------------|------|------|-----------|-------------|----------|----------|--------------|
| 000014 | M   | ~ 1990     | WILD | WILD | LOC_00005 | 10 Apr 1996 | UNK      | Transfer | Wild Born    |
| 000018 | M   | 1 Jan 1990 | WILD | WILD | LOC_00005 | 1 Jan 1990  | UNK      | Transfer | Wild Born    |
| 000019 | F   | 1 Jan 1990 | WILD | WILD | LOC_00005 | 1 Jan 1990  | UNK      | Transfer | Wild Born    |

Totals: 2.1.0 (3)

**Locations: LOC\_00006/**

| Stud # | Sex | Hatch Date   | Sire   | Dam    | Location               | Date                         | Local ID   | Event             | Birth-Origin |
|--------|-----|--------------|--------|--------|------------------------|------------------------------|------------|-------------------|--------------|
| 000023 | F   | ~ 1 Jan 1994 | 000002 | 000007 | LOC_00001<br>LOC_00006 | ~ 1 Jan 1994<br>~ 6 Jul 1994 | UNK<br>UNK | Hatch<br>Transfer | Captive Born |
| 000024 | ?   | ~19 Apr 1992 | 000002 | 000010 | LOC_00001<br>LOC_00006 | ~19 Apr 1992<br>6 Jul 1992   | UNK<br>UNK | Hatch<br>Transfer | Captive Born |
| 000025 | M   | ~ 1990       | WILD   | WILD   | LOC_00006              | 1 Jan 1994                   | UNK        | Transfer          | Wild Born    |
| 000026 | F   | ~ 1990       | WILD   | WILD   | LOC_00006              | 1 Jan 1994                   | UNK        | Transfer          | Wild Born    |
| 000027 | ?   | ~ 6 Jul 1993 | 000025 | 000026 | LOC_00006              | ~ 6 Jul 1993                 | UNK        | Hatch             | Captive Born |
| 000028 | ?   | ~13 Jun 1994 | 000025 | 000026 | LOC_00006              | ~13 Jun 1994                 | UNK        | Hatch             | Captive Born |

|        |   |              |        |        |           |              |     |          |              |
|--------|---|--------------|--------|--------|-----------|--------------|-----|----------|--------------|
| 000029 | ? | ~26 Jul 1994 | 000025 | 000026 | LOC_00006 | ~26 Jul 1994 | UNK | Hatch    | Captive Born |
| 000041 | M | ~ 1996       | WILD   | WILD   | LOC_00006 | 8 May 1996   | UNK | Transfer | Wild Born    |
| 000042 | F | ~ 1996       | WILD   | WILD   | LOC_00006 | 8 May 1996   | UNK | Transfer | Wild Born    |

Totals: 2.3.4 (9)

**Locations: LOC\_00007/**

| Stud # | Sex | Hatch Date   | Sire | Dam    | Location  | Date         | Local ID | Event    | Birth-Origin |
|--------|-----|--------------|------|--------|-----------|--------------|----------|----------|--------------|
| 000033 | F   | 1 Jan 1985   | WILD | WILD   | LOC_00007 | ~ 1 Jan 1985 | UNK      | Transfer | Wild Born    |
|        |     |              |      |        | LOC_00002 | ~24 Nov 1998 | UNK      | Transfer |              |
| 000034 | F   | 1 Jan 1985   | WILD | WILD   | LOC_00007 | ~ 1 Jan 1985 | UNK      | Transfer | Wild Born    |
|        |     |              |      |        | LOC_00002 | ~24 Nov 1998 | UNK      | Transfer |              |
| 000035 | F   | ~ 1987       | WILD | WILD   | LOC_00007 | ~ 1 Jan 1987 | UNK      | Transfer | Wild Born    |
|        |     |              |      |        | LOC_00008 | 1 Dec 1998   | UNK      | Transfer |              |
| 000036 | M   | ~ 1987       | WILD | WILD   | LOC_00007 | ~ 1 Jan 1987 | UNK      | Transfer | Wild Born    |
|        |     |              |      |        | LOC_00008 | ~ 1 Dec 1998 | UNK      | Transfer |              |
| 000037 | F   | ~12 Mar 1989 | UNK  | 000033 | LOC_00007 | ~12 Mar 1989 | UNK      | Hatch    | Captive Born |
|        |     |              |      |        | LOC_00009 | ~17 Mar 1997 | UNK      | Transfer |              |
| 000038 | F   | ~12 Mar 1989 | UNK  | 000033 | LOC_00007 | ~12 Mar 1989 | UNK      | Hatch    | Captive Born |
|        |     |              |      |        | LOC_00009 | ~17 Mar 1997 | UNK      | Transfer |              |

Totals: 1.5.0 (6)

**Locations: LOC\_00008/**

| Stud # | Sex | Hatch Date | Sire | Dam  | Location  | Date         | Local ID | Event    | Birth-Origin |
|--------|-----|------------|------|------|-----------|--------------|----------|----------|--------------|
| 000035 | F   | ~ 1987     | WILD | WILD | LOC_00007 | ~ 1 Jan 1987 | UNK      | Transfer | Wild Born    |
|        |     |            |      |      | LOC_00008 | 1 Dec 1998   | UNK      | Transfer |              |
| 000036 | M   | ~ 1987     | WILD | WILD | LOC_00007 | ~ 1 Jan 1987 | UNK      | Transfer | Wild Born    |
|        |     |            |      |      | LOC_00008 | ~ 1 Dec 1998 | UNK      | Transfer |              |

Totals: 1.1.0 (2)

**Locations: LOC\_00009/**

| Stud # | Sex | Hatch Date   | Sire | Dam    | Location  | Date         | Local ID | Event    | Birth-Origin |
|--------|-----|--------------|------|--------|-----------|--------------|----------|----------|--------------|
| 000037 | F   | ~12 Mar 1989 | UNK  | 000033 | LOC_00007 | ~12 Mar 1989 | UNK      | Hatch    | Captive Born |
|        |     |              |      |        | LOC_00009 | ~17 Mar 1997 | UNK      | Transfer |              |
| 000038 | F   | ~12 Mar 1989 | UNK  | 000033 | LOC_00007 | ~12 Mar 1989 | UNK      | Hatch    | Captive Born |
|        |     |              |      |        | LOC_00009 | ~17 Mar 1997 | UNK      | Transfer |              |

Totals: 0.2.0 (2)

**Locations: LOC\_00010/**

| Stud # | Sex | Hatch Date | Sire | Dam  | Location  | Date         | Local ID | Event    | Birth-Origin |
|--------|-----|------------|------|------|-----------|--------------|----------|----------|--------------|
| 000057 | M   | ~ Feb 1998 | WILD | WILD | LOC_00001 | ~ Feb 1998   | UNK      | Transfer | Wild Born    |
|        |     |            |      |      | LOC_00010 | 7 Feb 1998   | UNK      | Transfer |              |
| 000058 | F   | ~ Feb 1998 | WILD | WILD | LOC_00001 | ~ Feb 1998   | UNK      | Transfer | Wild Born    |
|        |     |            |      |      | LOC_00010 | ~ 7 Feb 1998 | UNK      | Transfer |              |

Totals: 1.1.0 (2)

**Locations: LOC\_00011/**

| Stud #<br>Name | Sex | Hatch Date<br>Breeder # | Sire   | Dam    | Location  | Date                       | Local ID   | Event             | Birth-Origin |
|----------------|-----|-------------------------|--------|--------|-----------|----------------------------|------------|-------------------|--------------|
| 000049         | M   | ~ 1990                  | WILD   | WILD   | LOC_00011 | 1 Jan 1998                 | UNK        | Transfer          | Wild Born    |
| 000050         | M   | ~ 1998                  | WILD   | WILD   | LOC_00011 | 1 Jan 1998                 | UNK        | Transfer          | Wild Born    |
| 000051         | M   | ~ 1998                  | WILD   | WILD   | LOC_00011 | 1 Jan 1998                 | UNK        | Transfer          | Wild Born    |
| 000052         | F   | ~ 1990                  | WILD   | WILD   | LOC_00011 | 1 Jan 1998                 | UNK        | Transfer          | Wild Born    |
| 000053         | F   | ~ 1998                  | WILD   | WILD   | LOC_00011 | 1 Jan 1998                 | UNK        | Transfer          | Wild Born    |
| 000054         | F   | ~ 1998                  | WILD   | WILD   | LOC_00011 | 1 Jan 1998                 | UNK        | Transfer          | Wild Born    |
| 000055         | ?   | ~ 1 Sep 1995            | 000049 | 000052 | LOC_00011 | ~ 1 Sep 1995<br>1 Jan 1998 | UNK<br>UNK | Hatch<br>Transfer | Captive Born |

Totals: 3.3.1 (7)

**Locations: LOC\_00012/**

| Stud #<br>Name | Sex | Hatch Date<br>Breeder # | Sire | Dam  | Location  | Date         | Local ID | Event    | Birth-Origin |
|----------------|-----|-------------------------|------|------|-----------|--------------|----------|----------|--------------|
| 000017         | M   | ????                    | WILD | WILD | LOC_00012 | 1 Dec 1994   | UNK      | Transfer | Wild Born    |
| 000030         | F   | ~ 1994                  | WILD | WILD | LOC_00012 | ~14 Nov 1994 | UNK      | Transfer | Wild Born    |

Totals: 1.1.0 (2)

**Locations: LOC\_00013/**

| Stud #<br>Name | Sex | Hatch Date<br>Breeder # | Sire   | Dam    | Location  | Date         | Local ID | Event    | Birth-Origin |
|----------------|-----|-------------------------|--------|--------|-----------|--------------|----------|----------|--------------|
| 000022         | M   | 1 Jan 1994              | WILD   | WILD   | LOC_00013 | 14 Aug 1994  | UNK      | Transfer | Wild Born    |
| 000031         | M   | ~31 Dec 1994            | WILD   | WILD   | LOC_00013 | 31 Dec 1994  | UNK      | Transfer | Wild Born    |
| 000032         | F   | ~31 Dec 1994            | WILD   | WILD   | LOC_00013 | ~31 Dec 1994 | UNK      | Transfer | Wild Born    |
| 000039         | ?   | ~25 Jun 1995            | 000022 | 000032 | LOC_00013 | ~25 Jun 1995 | UNK      | Hatch    | Captive Born |
| 000040         | ?   | ~14 Jul 1995            | 000022 | 000032 | LOC_00013 | ~14 Jul 1995 | UNK      | Hatch    | Captive Born |

Totals: 2.1.2 (5)

**Locations: LOC\_00014/**

| Stud #<br>Name | Sex | Hatch Date<br>Breeder # | Sire | Dam  | Location  | Date         | Local ID | Event    | Birth-Origin |
|----------------|-----|-------------------------|------|------|-----------|--------------|----------|----------|--------------|
| 000020         | M   | 1 Jan 1994              | WILD | WILD | LOC_00014 | 1 Jan 1994   | UNK      | Transfer | Wild Born    |
| 000021         | F   | 1 Jan 1994              | WILD | WILD | LOC_00014 | 1 Jan 1994   | UNK      | Transfer | Wild Born    |
| 000047         | M   | ~11 Jul 1997            | WILD | WILD | LOC_00014 | 11 Jul 1997  | UNK      | Transfer | Wild Born    |
| 000048         | F   | ~11 Jul 1997            | WILD | WILD | LOC_00014 | ~11 Jul 1997 | UNK      | Transfer | Wild Born    |

Totals: 2.2.0 (4)

**Locations: LOC\_00016/**

| Stud #<br>Name | Sex | Hatch Date<br>Breeder # | Sire | Dam  | Location  | Date       | Local ID | Event    | Birth-Origin |
|----------------|-----|-------------------------|------|------|-----------|------------|----------|----------|--------------|
| 000012         | F   | ~ 1990                  |      |      | LOC_00016 | 1 Aug 1998 | UNK      | Transfer | Captive Born |
| 000013         | F   | 1 Jan 1990              |      |      | LOC_00016 | 1 Aug 1998 | UNK      | Transfer | Captive Born |
| 000015         | M   | ~ 1990                  | WILD | WILD | LOC_00016 | 1 Aug 1998 | UNK      | Transfer | Wild Born    |



|        |   |              |        |        |           |              |     |          |              |
|--------|---|--------------|--------|--------|-----------|--------------|-----|----------|--------------|
| 000016 | F | ~23 Aug 1998 | 000003 | 000005 | LOC_00001 | ~23 Aug 1998 | UNK | Hatch    | Captive Born |
|        |   |              |        |        | LOC_00016 | ~ 1 Sep 1998 | UNK | Transfer |              |
| 000059 | M | 1 Jan 1998   | WILD   | WILD   | LOC_00016 | 1 Aug 1998   | UNK | Transfer | Wild Born    |
| 000060 | F | 1 Jan 1998   | WILD   | WILD   | LOC_00016 | 1 Aug 1998   | UNK | Transfer | Wild Born    |

Totals: 2.4.0 (6)

**Locations: LOC\_00017/**

| Stud # | Sex       | Hatch Date   | Sire | Dam    | Location  | Date         | Local ID | Event    | Birth-Origin |
|--------|-----------|--------------|------|--------|-----------|--------------|----------|----------|--------------|
| Name   | Breeder # |              |      |        |           |              |          |          |              |
| 000067 | ?         | ~ Jan 2000   | UNK  | UNK    | LOC_00017 | ~ Jan 2000   | UNK      | Hatch    | Captive Born |
|        |           |              |      |        | LOC_00003 | ~ Jan 2003   | UNK      | Transfer |              |
| 000068 | ?         | ~ Jan 2000   | UNK  | UNK    | LOC_00017 | ~ Jan 2000   | UNK      | Hatch    | Captive Born |
|        |           |              |      |        | LOC_00003 | ~ Jan 2003   | UNK      | Transfer |              |
| 000069 | ?         | ~15 Apr 2000 | MULT | 000033 | LOC_00002 | ~15 Apr 2000 | UNK      | Hatch    | Captive Born |
|        |           |              |      |        | LOC_00017 | ~ Aug 2000   | UNK      | Transfer |              |
|        |           |              |      |        | LOC_00003 | ~ Jan 2003   | UNK      | Transfer |              |
| 000070 | ?         | ~15 Apr 2000 | MULT | 000033 | LOC_00002 | ~15 Apr 2000 | UNK      | Hatch    | Captive Born |
|        |           |              |      |        | LOC_00017 | ~ Sep 2000   | UNK      | Transfer |              |
|        |           |              |      |        | LOC_00003 | ~ Jan 2003   | UNK      | Transfer |              |

Totals: 0.0.4 (4)

**Locations: LOC\_00018/**

| Stud # | Sex       | Hatch Date | Sire | Dam  | Location  | Date         | Local ID | Event    | Birth-Origin |
|--------|-----------|------------|------|------|-----------|--------------|----------|----------|--------------|
| Name   | Breeder # |            |      |      |           |              |          |          |              |
| 000071 | ?         | ~ 1990     | WILD | WILD | LOC_00018 | ~ 1 May 1999 | UNK      | Transfer | Wild Born    |
| 000072 | ?         | ~ 1990     | WILD | WILD | LOC_00018 | ~ 1 May 1999 | UNK      | Transfer | Wild Born    |

Totals: 0.0.2 (2)

#### **4. Births.**

6 hatchlings are born at two locations



*Hatchling Cuora flavomarginata 2003*

#### **5. Imports/ New animals**

No new imports were added in the studbook.

The studbook received three specimens from a confiscation. These animals are placed costless within the studbook. An donation for the Cuc Phuong breedingproject was asked. Since the three animals showed some distinctive characteristics especially in the shape the studbook advised to keep those seperated. This advise is followed up by the keeper.

#### **6. Deaths.**

One juvenile animal died during 2003. The reason is unknown but an mishaped beak might be the reason for an bacterial infection.

#### **7. Transfers.**

Three animals (2.1) are transfered from Iguana Vlissingen towards an participant.



*Confiscated animals, domed and elongated shape*

## **8. Discussion.**

But because of the fact that there are no additional importation and a low number of breeding locations it will be hard to expand the studbook. The believe of the studbookkeeper is that the initiative has mainly to come from the participant since they have to cooperate to obtain a healthy studbook. Therefor I think it is essential for the studbook as the organisation (ESF) to find a way to keep participant involved.

Another discussion is we have to find out how to breed males since most captive born animals are females. A participant is willing to incubate at a lower temperature. Although enough males are available it might be good to know and maintain an good balanced population

### **8.2 In situ status of the species.**

The in situ situation is difficult to judge. There are some research going on on a population and this seems helathy. But the Asian Turtle Crisis is affecting all species and should als have a negative effect on the natural populations. The fact that this species is listed on CITES doesn't mean it is on the safe side therefor it is essential to maintain this studbook.

Another indicator are the numbers of specimens found on foodmarkets. *Cuora flavomarginata* isn't the most encountered species and sometimes even very low numbers are reported. Since the authorities in eastern-Asia do not have much knowledge of the species and CITES it might be no reason for the absence or low numbers. It is likely that the natural population is vanishing. Of course since the lack of data this speculated.

### **8.3 Activities planned for 2004.**

- Incubation of eggs at lowertemperatures
- Outdoorkeeping continued to see if the summer of 2003 had an influence on reproductivity
- Promote the studbook via the website (<http://www.xs4all.nl/~cuora>) and update the contents.