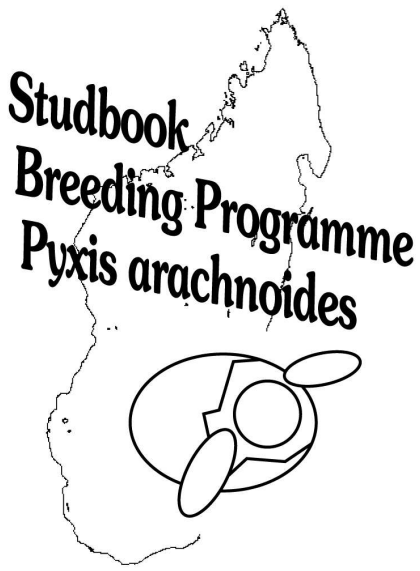
Studbook
Breeding Programme
Pyxis arachnoides



Annual Report

2004

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Since 1992 several Dutch herpetological societies have initiated studbook programmes on reptile and amphibian species. In 1997, all programmes were condensed into an independent foundation currently known as European Studbook Foundation. Early in its development, the foundation formulated the very important criteria that no studbook participant would jeopardise their important herpetological contributions and goals with any commercial enterprise from their specimens, either currently or in the future.
The aims of the studbook programmes in general are:

- To inform the herpetological community with data and publications generated from captive situations and field studies
- Procuring, maintaining, and reproducing genetically healthy captive individuals for future loans to recognised individuals and institutions

These conservation goals are particularly relevant today as wild populations of many reptiles and amphibians experience increasing survival pressures. Establishing working programs that emphasise captive husbandry in conjunction with fieldwork is crucial in developing sound wildlife management. A significant contribution that captive animals may perform is through the concept of re-introduction of their potential offspring. Although re-introduction of species is at a very early stage and occasionally controversial, there may come a time when the offspring of captive animals are the sole source for re-introducing species into previously suitable habitat where the natural population has become extinct. More importantly re-introduction has the potential of insuring genetic diversity to populations that have become unnaturally isolated due to human interference.

1. INTRODUCTION AND ACTIVITIES IN 2004

Introduction

This report is an update of the annual report of the Studbook Breeding Programme *Pyxis arachnoides* published in 2003. The programme aims to form genetically healthy, reproducing captive populations, to study these, and to gather and distribute as much information about *P. arachnoides* as possible. In order to keep the studbook manageable (in terms of number of tortoises and contacts between participants and coordinator), it has been decided that the studbook will operate exclusively in Europe, despite occasional applications from keepers of *P. arachnoides* in the USA. *Pyxis a. arachnoides* especially appears to be present in Europe in sufficiently large numbers. It would be a welcome development if someone in the USA would set up a studbook on *P. arachnoides*, similar to the Studbook Breeding Programme *Pyxis arachnoides*. Eventually, both studbooks could be linked.

This report will summarise the activities of the Studbook Breeding Programme *Pyxis arachnoides* in 2004, plans for 2005, and it will give an overview of the current composition and changes in the captive population *P. arachnoides*. Additional information may be obtained from the internet site of the programme, http://home.kabelfoon.nl/~loehr/pyxis, or from the studbook co-ordinator.

In the following sections, an overview of the main activities in 2004 is presented.

Internet site

The internet site of the Studbook Breeding Programme *Pyxis arachnoides* has not undergone any major changes. A new studbook programme, SEBAG, has been introduced to make maintaining of a studbook population easier.
The actual composition of the studbook population has been updated on an annual basis. The appendices in the annual studbook reports remain the major source of husbandry information.
There have been no more complaints on commercials popping up at the site, however the situation has remained the same. It remains the idea of the studbook coordinator that a private site for the studbook breeding programme *Pyxis arachnoides* is in orderThe coordinator will see what the possibillities are (eg. Domainname, costs, webbuilding,...).

Presentations and publications

In 2004, several publications, written by studbook participants, were submitted and published. One manuscript on breeding *Pyxis arachnoides brygooi* was published in “Radiata” (a German magazine). Another manuscript on keeping and breeding *Pyxis a. arachnoides* was published in “Schildkroeten im Focus” (a German magazine).

Contacts

In 2004 the search for interested keepers was continued. Several new locations were found interested in the studbook but so far only one new location was registered. Slowly but surely, more and more keepers/breeders of *Pyxis arachnoides* seem to find their way to the studbook coordinator, not always resulting in registration (there still seems to be a certain threshold for a number of people) but definitely resulting in providing and distributing valuable information on husbandry of *Pyxis arachnoides*. Perhaps the new CITES-status of the species will persuade more keepers to join the studbook. All participants have been notified that, as of this year, all *Pyxis arachnoides* are placed under CITES I (as requested by Madagascar).

An American zoo has made contact for husbandry information about their newly acquired specimen.

2. PLANS FOR ACTIVITIES IN 2005

A certain amount of time was spend on the studbook during 2004, but it was far from enough. The studbook coordinator will have to spend more time on this studbook to reach more people. Updating and working on the studbook could be more efficient if the website were to be placed in the coordinator's hands. The biggest disadvantage is that the website will have to change its address.
On the other hand a certain amount of cooperation will have to be provided by the studbookparticipants. This is a known problem for not only this studbook but for several studbooks. As known there are partcipants that will allways answer and those who seem to be, more or less, never home. This, off course, makes running a studbook more difficult then it should be.
As more keepers start to breed one or more subspecies, the interaction between the participants and between the participants and the studbook coordinator will have to increase in order to avoid inbreeding and to maintain the optimum amount of unrelated bloodlines. Not allways easy to achieve this, due to the fact that the species is highly priced and not allways easy to find or not allways found at the right time or by the right person(s). It happens that persons buy 2 related hatchlings but have no more funding to acquire more unrelated hatchlings or start coupling captive born adults to their wild-caught counterparts. This situation is not ideal for the species but , sometimes, cannot be avoided by the coordinator.
The studbook coordinator replaced his adult couple to another location in Oct 2003 and the first positive results are visible. The couple, or better the female, started laying eggs. Where no more than two eggs were laid at my location, this first year already 4 eggs were laid. That this new location has the right environment for this species is becoming more obvious every year.
More attempts will be made to reach keepers/breeders. This will be done by contacting several tortoise and reptile societies in Europe. An article will be publihed, in English, to try to boost the interest of the people and to reach a broader public.

Internet site

In 2005, the internet site of the Studbook Breeding Programme *Pyxis arachnoides* will remain to be maintained by Victor Loehr, who receives the updates from Frank Van Loon. There are indirect plans for changes, the sooner, the better.

Presentations and publications

A major English manuscript on husbandry and breeding of *P. a. arachnoides* is currently in press in the proceedings of the first European symposium on turtles and tortoises (Vienna, January 2002). However, this has not been written by a studbook participant.

3. CURRENT LIVING STUDBOOK POPULATION

The total number of registered live specimens *P. arachnoides* increased to 78. Three specimens died, and 5 were born at three locations. Five specimens were acquired from outside the studbook. Three captive bred animals were sold to a person outside the studbook, who does not wish to join. This, off course, is his privilege but we have to try to keep as much animals in the studbook as we can. One way of doing this could be to include in the transfer, the statement that the animals should stay in the studbook. The specimens are currently housed at 15 locations (14 in 2003) in the Netherlands (8), Belgium (1) and Germany (6). All subspecies are represented in the studbook, but *P. a. oblonga* and *P. a. brygooi* are very limited in numbers.

All transfers in 2004 are related to subspecies *P. a. arachnoides*. Although negotiations are being made for the transfer of *Pyxis arachnoides oblonga*.

Table I: Current living studbook population *Pyxis arachnoides* per location as registered in the studbook. The numbers far right are relative numbers per location, indicating which specimens are housed together. MULT1 is sire 26 or 27. UNKx specimens are founders outside of the studbook, used to register relationships between offspring in the studbook.

a) Pyxis arachnoides arachnoides

Location: A08

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
18	M	????	WILD	WILD	A08	~ Jan 1995	_____	Transfer	
					ROTTERDAM	4 Sep 2002	704790	Loan to	
					A08	17 Nov 2004	_____	Transfer	3
23	M	????	WILD	WILD	A05	????	_____	Transfer	
					A10	28 Jun 1999	PAAM1	Transfer	
					A08	29 Sep 2003	_____	Loan to	3
24	F	????	WILD	WILD	A05	????	_____	Transfer	
					A10	28 Jun 1999	PAAF1	Transfer	
					A08	29 Sep 2003	_____	Loan to	3
26	M	????	WILD	WILD	A11	~ 1985	_____	Transfer	
					A02	29 Dec 1999	I	Loan to	
					A08	18 Feb 2001	_____	Loan to	1
27	M	????	WILD	WILD	A11	~ 1985	_____	Transfer	
					A02	29 Dec 1999	II	Loan to	
					A08	18 Feb 2001	_____	Loan to	1
29	F	????	WILD	WILD	A11	~ 1985	_____	Transfer	
					A02	29 Dec 1999	IV	Loan to	
					A08	18 Feb 2001	_____	Loan to	1
71	F	????	WILD	WILD	LONDON RP	????	_____	Transfer	
					ROTTERDAM	23 Dec 2001	704781	Transfer	
					A08	17 Nov 2004		Loan to	3
80	?	26 Jul 2002	MULT1	29	A08	26 Jul 2002	_____	Hatch	2
88	?	19 Jun 2003	MULT1	29	A08	19 Jun 2003	_____	Hatch	2
89	?	18 Jul 2003	MULT1	29	A08	18 Jul 2003	_____	Hatch	2
90	?	08 Aug 2003	MULT1	29	A08	08 Aug 2003	_____	Hatch	2
91	?	31 Aug 2003	MULT1	29	A08	31 Aug 2003	_____	Hatch	2
93	?	09 Jun 2004	MULT1	29	A08	09 Jun 2004	_____	Hatch	2
94	?	17 Jun 2004	MULT1	29	A08	17 JUN 2004	_____	Hatch	2
95	?	04 Jul 2004	MULT1	29	A08	04 Jul 2004	_____	Hatch	2

Totals: 4.3.8 (15)

Location: A10

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
79	?	06 May 2002	MULT1	29	A08	06 May 2002	_____	Hatch	
					A10	29 Sep 2003	_____	Transfer	
84	?	08 Jun 2002	MULT1	29	A08	08 Jun 2002	_____	Hatch	
					A10	29 Sep 2003	_____	Transfer	

Totals: 0.0.2 (2)

Location: A11

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
68	?	14 Jun 2001	MULT1	29	A02	14 Jun 2001	IV-2	Hatch	
					A11	17 Feb 2002	_____	Transfer	1

Totals: 0.0.1 (1)

Location: A19

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
40	?	13 Aug 1999	UNK1	UNK2	A07	13 Aug 1999	_____	Hatch	
					A19	1 Mar 2000	1	Transfer	1?
41	?	28 Aug 1999	UNK1	UNK2	A07	28 Aug 1999	_____	Hatch	
					A19	1 Mar 2000	2	Transfer	1?
42	?	8 Aug 2000	UNK1	UNK2	A07	8 Aug 2000	_____	Hatch	
					A19	1 Sep 2000	3	Transfer	1?
43	?	12 Aug 2000	UNK1	UNK2	A07	12 Aug 2000	_____	Hatch	
					A19	1 Sep 2000	4	Transfer	1?

Totals: 0.0.4 (4)

Location: A22

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
1	M	9 Sep 1996	UNK1	UNK2	A07	9 Sep 1996	_____	Hatch	
					A02	22 Nov 1998	960909	Loan to	
					A22	24 Feb 2001	_____	Loan to	1
2	F	16 Nov 1996	UNK1	UNK2	A07	16 Nov 1996	_____	Hatch	
					A02	22 Nov 1998	961116	Loan to	
					A22	24 Feb 2001	_____	Loan to	1
3	M	16 Sep 1997	UNK1	UNK2	A07	16 Sep 1997	_____	Hatch	
					A02	22 Nov 1998	970916	Loan to	
					A22	24 Feb 2001	_____	Loan to	1
96	F	????	WILD	WILD	A22	27 Dec 2004	_____	Transfer	2
97	M	????	WILD	WILD	A22	27 Dec 2004	_____	Transfer	2

Totals: 3.2.0 (5)

Location: A23

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
58	M	????	WILD	WILD	A23	30 Jul 2000	DONALD	Transfer	1
59	F	????	WILD	WILD	A23	30 Jul 2000	DAISY	Transfer	1
60	F	????	WILD	WILD	A23	30 Jul 2000	EUSEBI	Transfer	1
61	F	????	WILD	WILD	A23	30 Jul 2000	PAULA	Transfer	2
69	M	????	WILD	WILD	A23	5 Jul 2001	PLUTO	Transfer	2
98	?	04 May 2004	58	60	A23	5 May 2004	KNIRPS	Hatch	3

Totals: 2.3.1 (6)

Location: A32

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
4	M	????	WILD	WILD	A04	17 May 1999	ULI	Transfer	
					A32	25 May 2002	ULI	Loan to	

Totals: 1.0.0 (1)

Location: A36

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
67	?	15 Mar 2001	MULT1	29	A02	15 Mar 2001	_____	Hatch	
					A36	24 Feb 2002	_____	Transfer	1
82	?	~ Jan 2000	UNK8	UNK9	A32	~ Jan 2000	_____	Hatch	
					A36	15 Aug 2002	_____	Transfer	1
101	?	~2000	UNK8	UNK9	A32	~2000	_____	Hatch	
					A36	10 Dec 2004	_____	Transfer	1

Totals: 0.0.3 (3)

Location: A39

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
86	?	28 Oct 2000	UNK1	UNK2	A07	28 Oct 2000	_____	Hatch	
					A39	16 Jul 2002	_____	Transfer	1
87	?	29 Aug 2001	UNK1	UNK2	A07	29 Aug 2001	_____	Hatch	
					A39	16 Jul 2002	_____	Transfer	1

Totals: 0.0.2 (2)

Location: ROTTERDAM

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
20	M	????	WILD	WILD	WASS BR C	8 Dec 1990	_____	Transfer	
					ROTTERDAM	17 Apr 2002	704725	Transfer	1
34	M	????	WILD	WILD	ROTTERDAM	7 Jun 1997	703791	Transfer	2
35	M	????	WILD	WILD	ROTTERDAM	7 Jun 1997	703792	Transfer	3
36	F	????	WILD	WILD	ROTTERDAM	7 Jun 1997	703793	Transfer	2
37	F	????	WILD	WILD	ROTTERDAM	7 Jun 1997	703794	Transfer	4
38	M	????	WILD	WILD	VLISSINGE	12 Jul 1987	_____	Transfer	
					ROTTERDAM	9 Jul 1997	703825	Transfer	4
48	?	21 Oct 1999	34	36	ROTTERDAM	21 Oct 1999	704297	Hatch	5
72	F	????	WILD	WILD	LONDON RP	????	_____	Transfer	
					ROTTERDAM	23 Dec 2001	704582	Transfer	3
73	?	????	WILD	WILD	LONDON RP	????	_____	Transfer	
					ROTTERDAM	23 Dec 2001	704583	Transfer	6
102	?	02 Jun 2004	34	36	ROTTERDAM	02 Jun 2004	705088	Hatch	7

Totals: 4.4.3 (11)

Location: WASS BR C

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
19	M	????	WILD	WILD	WASS BR C	8 Dec 1990	DAMAGE	Transfer	1

Totals: 1.0.0 (1)

ROTTERDAM did agree to transfer a couple to another location. Location A08 was the previous owner of one of the animals involved and has great breeding results with the subspecies. Breeding at ROTTERDAM seems to start also, although it is in an early stage.
Locaton A22 has many (juvenile) animals, but 5 animals will be transferred to location A11. A request has been send to Location A11 to register the animals, no reply has been received to this date.

Solitary males fit for breeding are present at locations A08 (specimen 26 or 27), WASS BR C (19) and location A22 (specimen 1 or 3) . Male 4 at location A32 is probably housed in a breeding pair, since additional specimens *P. a. arachnoides* are present at this location. These have not yet been registered in the studbook, and therefore location A32 has been requested ,again, to register these specimens too. The request was declined.

A solitary female (59 or 60) is present at location A23. It would be advisable to transfer one female to a location with fewer specimens and with a solitary male, to form an additional (potential) bloodline (this suggestion has been turned down by the owner) or a captive bred specimen (97) could be exchanged with a solitary WILD male (for example at location A08 or WASS BR C) and, at his turn, this male could be paired with a WILD female housed at this location (specimen 59 or 60). A last option is to put another solitary WILD male at this location (A23).

Location A22 keeps all the captive bred *Pyxis arachnoides arachnoides* in the same enclosure, this is not recommended. As the tortoises reach sexual maturity, they will start to breed, in this case inbreeding could be the result. It is advised that males 1 and 3 are put in another enclosure. Remember that once the tortoises have been seen mating, the female could store sperm for 3 years. Another possibillity is the exchange of a male (1 or 3) from location A22 with a male at another location (A08 or WASS BR C).

Location A08 has 8 captive bred juveniles, all of the same adults. It is advised that, once the juveniles become older, they should be paired with (recent) offspring of Location A07 (location A39, A19, since it has been a while that the coordinator has heard from A19, the coordinator would advice location A39) or location A23 or other captive bred animals of the same subspecies.

b) Pyxis arachnoides brygooi

Location: A03

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
30	M	????	WILD	WILD	ROTTERDAM	14 Jan 1991	702004	Transfer	
					A03	4 Jan 1995	HZ0305	Loan to	1
31	F	????	WILD	WILD	ROTTERDAM	14 Jan 1991	702005	Transfer	
					A03	4 Jan 1995	HZ0306	Loan to	1
32	F	11 Nov 1994	30	31	ROTTERDAM	11 Nov 1994	703152	Hatch	
					A03	25 Apr 1998	HZ0539	Loan to	2
49	F	????	WILD	WILD	ROTTERDAM	????	_____	Transfer	
					A03	21 Jun 1998	HZ0561	Loan to	1
50	M	1 Jul 1996	30	31	A03	1 Jul 1996	HZ0428	Hatch	3
52	M	14 May 1999	30	31	A03	14 May 1999	HZ0624	Hatch	5
53	F	7 Jun 1999	30	31	A03	7 Jun 1999	HZ0627	Hatch	6
54	?	19 Mar 2000	30	31	A03	19 Mar 2000	HZ0683	Hatch	7
55	?	12 May 2000	30	31	A03	12 May 2000	HZ0691	Hatch	8
92	?	03 May 2003	30	31	A03	03 May 2003	HZ0899	Hatch	

Totals: 3.4.3 (10)

Location: A10

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
74	F	????	UNK1	UNK2	A10	10 Oct 2001	Pabf01	Transfer	1
75	?	????	UNK1	UNK2	A10	10 Oct 2001	Pabu02	Transfer	2
76	M	????	UNK1	UNK2	A10	10 Oct 2001	Pabm01	Transfer	1

Totals: 1.1.1 (3)

Location: A11

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
56	M	????	WILD	WILD	A11	~1985	_____	Transfer
					A03	16 Oct 1999	HZ0664	Loan to
					A11	08 Nov 2003	_____	Transfer

Totals: 1.0.0 (1)

A large proportion of the *P. a. brygooi* population in the studbook is housed at location A03. As has already been outlined for *P. a. arachnoides*, this makes the population vulnerable for disaster, and spreading the specimens over several locations should be considered. Location A03 has argued that long-term growth data is gathered from the captive-bred specimens at this location and this should be included in any considerations to transfer specimens. The current combination of adult founder specimens appears to be reasonable, given the lack of solitary specimens. However, it is of the utmost importance that locations A03 and A10 provide the gender of their juvenile specimens as soon as this is known, to allow exchange of specimens and formation of additional breeding pairs.
Location A10 has put animals 74 and 75 together, this is not advisable. Better is to couple the female and male to other animals from location A03 and/or location A11.

c) Pyxis arachnoides oblonga

Location: A17

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
13	?	24 Oct 1997	UNK1	UNK2	A06	24 Oct 1997	_____	Hatch
					A17	25 Jul 2000	_____	Transfer 1?
14	?	28 May 1997	UNK1	UNK2	A06	28 May 1997	_____	Hatch
					A17	25 Jul 2000	_____	Transfer 1?
15	?	26 Jun 1997	UNK1	UNK3	A06	26 Jun 1997	_____	Hatch
					A17	25 Jul 2000	_____	Transfer 1?

Totals: 0.0.3 (3)

Location: A18

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
16	?	27 Apr 1999	UNK1	UNK2	A06	27 Apr 1999	_____	Hatch
					A18	25 Jul 2000	_____	Transfer 1
17	?	20 Jul 1999	UNK1	UNK2	A06	20 Jul 1999	_____	Hatch
					A18	25 Jul 2000	_____	Transfer 1

Totals: 0.0.2 (2)

Location: A40

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
99	M	31 Dec 1999	UNK12	UNK13	A40	21 Jul 2004	_____	Transfer 1
100	M	31 Dec 1999	UNK12	UNK13	A40	21 Jul 2004	_____	Transfer 1

Totals: 2.0.0 (2)

A new location has been found with two related captive bred specimen. Location A18 probably has a female and a male, the male at this location is somexhat behind in growth. Therefor it is advised by the coordinator that Location A18 and location A40 should get in touch to transfer one of their specimen to the other Location (in progress).
Overall, the situation still is very worrisome. It is of importance to acquire additional founder specimens in the studbook.

4. IMPORTS, BIRTHS AND DEATHS

Imports of *P. arachnoides*, organised by the Studbook Breeding Programme *Pyxis arachnoides*, did not take place in 2004. Plans to import small numbers of *P. a. brygooi* and *P. a. oblonga* might be supported by the programme, as it appears unlikely that a sufficiently large number of tortoises for a viable captive population will be found.
One subspecies was bred in 2004, *Pyxis arachnoides arachnoides* (3 at location A08, 1 at location A23 and 1 at location ROTTERDAM).

Table II: Births of *P. arachnoides* in 2004.

a) *Pyxis arachnoides arachnoides*. MULT1 is sire 27 or 28

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
93	?	09 Jun 2004	MULT1	29	A08	09 Jun 2004	_____	Hatch
94	?	17 Jun 2004	MULT1	29	A08	17 Jun 2004	_____	Hatch
95	?	4 Jul 2004	MULT1	29	A08	4 Jul 2004	_____	Hatch
98	?	4 May 2004	58	60	A23	4 May 2004	_____	Hatch
102	?	2 Jul 2004	34	36	ROTTERDAM	2 Jul 2004	_____	Hatch

Totals: 0.0.5 (5)

A total of 3 *P. arachnoides* died in 2004, at 3 locations. One *P. a. arachnoides* died at location A22. This specimen was a male. One *P. a. arachnoides* died in 2004 at location A23 (female) from unknown causes. One *P. a. arachnoides* juvenile died at location A36. Another *P. a. arachnoides* died in 2003 at ROTTERDAM, this specimen is not listed below but is listed in the total overview (chapter 5).

Table III: Deaths of *P. arachnoides* in 2004.

a) Pyxis arachnoides arachnoides

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
81	?	~Jan 2000	UNK8	UNK9	A32	~Jan 2000	_____	Hatch
					A36	16 Jul 2002	_____	Transfer
					A36	~2004	_____	Death
83	F	~1996	UNK10	UNK11	A38	~1996	_____	Hatch
					A23	1 Aug 2002	Tamara	Transfer
					A23	17 Jan 2004	Tamara	Death
85	M	~1980	WILD	WILD	A22	10 Sep 2002	_____	Transfer
					A22	2004	_____	Death

Totals: 1.1.1 (3)

b)Pyxis arachnoides brygooi

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
51	?	27 Oct 1996	30	31	A03	27 Oct 1996	HZ0454	Hatch
						30 Sep 2004	HZ0454	Death

5. TOTAL STUDBOOK POPULATION AND FUTURE PERSPECTIVES

The current total registered studbook population consists of 93 specimens: 64 *P. a. arachnoides*, 7 *P. a. oblonga*, and 22 *P. a. brygooi*. From these, 41 are wild-caught specimens and 52 are captive-bred. Captive-bred specimens of all three subspecies are present. All but 16 tortoises are currently alive, housed at 15 (participating) locations.

The population is strongly biased towards subspecies *P. a. arachnoides*. The number of specimens of this subspecies is sufficiently large to offer a positive perspective for the studbook, but it is necessary to combine the specimens in an optimal way to create as many bloodlines as possible, to increase breeding success, and to minimise risks of disaster in the relatively small population (see chapter 3). The other two subspecies are present in much smaller numbers. Especially the situation regarding *P. a. oblonga* is critical. Inclusion of American keepers of this subspecies in the studbook, or importing a small number of (preferably captive) *P. a. brygooi* or *P. a. oblonga* should be considered.

Although many registered specimens in the studbook are captive-bred, it has to be kept in mind that many of these breeding results have been accomplished years ago, and often the reproducing adult specimens are housed at other locations, and have not been registered in the studbook population. In 2004, yet again few breeding results have been reported. Therefore, the main focus from this studbook should still be the distribution of information on husbandry and breeding of *P. arachnoides*. Appendix 1 of this report provides a small contribution to this objective.

Table IV: Total studbook population *Pyxis arachnoides*. MULT1 is sire 26 or 27. UNKx specimens are founders outside of the studbook, used to register relationships between offspring in the studbook.

a) Pyxis arachnoides arachnoides

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
1	M	9 Sep 1996	UNK1	UNK2	A07	9 Sep 1996	______	Hatch
					A02	22 Nov 1998	960909	Loan to
					A22	24 Feb 2001	______	Loan to
2	F	16 Nov 1996	UNK1	UNK2	A07	16 Nov 1996	______	Hatch
					A02	22 Nov 1998	961116	Loan to
					A22	24 Feb 2001	______	Loan to
3	M	16 Sep 1997	UNK1	UNK2	A07	16 Sep 1997	______	Hatch
					A02	22 Nov 1998	970916	Loan to
					A22	24 Feb 2001	______	Loan to
4	M	????	WILD	WILD	A04	17 May 1999	ULI	Transfer
					A32	25 May 2002	ULI	Loan to
5	F	????	WILD	WILD	A04	17 May 1999	ESTHER	Transfer
						30 Jun 2001		Death
18	M	????	WILD	WILD	A08	~ Jan 1995	______	Transfer
					ROTTERDAM	4 Sep 2002	704790	Loan to
					A08	17 Nov 2004	______	Transfer
19	M	????	WILD	WILD	WASS BR C	8 Dec 1990	DAMAGE	Transfer
20	M	????	WILD	WILD	WASS BR C	8 Dec 1990	______	Transfer
					ROTTERDAM	17 Apr 2002	704725	Transfer
21	F	????	WILD	WILD	WASS BR C	8 Dec 1990	______	Transfer
					ROTTERDAM	17 Apr 2002	704726	Transfer
					ROTTERDAM	13 Jun 2003	704726	Death
22	M	????	WILD	WILD	A05	????	______	Transfer
					A10	28 Jun 1999	PAAM1	Transfer
						26 Sep 2003	PAAM1	Death
23	M	????	WILD	WILD	A05	????	______	Transfer
					A10	28 Jun 1999	PAAM2	Transfer
24	F	????	WILD	WILD	A05	????	______	Transfer
					A10	28 Jun 1999	PAAF1	Transfer
25	?	2 Sep 1999	UNK3	24	A05	2 Sep 1999	______	Hatch

					A10	18 Sep 1999	PAAU1	Transfer
						20 Feb 2000		Death
26	M	????	WILD	WILD	A11	~ 1985	______	Transfer
					A02	29 Dec 1999	I	Loan to
					A08	18 Feb 2001	______	Loan to
27	M	????	WILD	WILD	A11	~ 1985	______	Transfer
					A02	29 Dec 1999	II	Loan to
					A08	18 Feb 2001	______	Loan to
28	F	????	WILD	WILD	A11	~ 1985	______	Transfer
					A02	29 Dec 1999	III	Loan to
					A08	31 Dec 2000	______	Loan to
						9 Mar 2002		Death
29	F	????	WILD	WILD	A11	~ 1985	______	Transfer
					A02	29 Dec 1999	IV	Loan to
					A08	18 Feb 2001	______	Loan to
33	M	????	WILD	WILD	ROTTERDAM	14 Jan 1991	702003	Transfer
					LONDON RP	11 Aug 2000	______	Loan to
						~ Jul 2001		Death
34	M	????	WILD	WILD	ROTTERDAM	7 Jun 1997	703791	Transfer
35	M	????	WILD	WILD	ROTTERDAM	7 Jun 1997	703792	Transfer
36	F	????	WILD	WILD	ROTTERDAM	7 Jun 1997	703793	Transfer
37	F	????	WILD	WILD	ROTTERDAM	7 Jun 1997	703794	Transfer
38	M	????	WILD	WILD	VLISSINGE	12 Jul 1987	______	Transfer
					ROTTERDAM	9 Jul 1997	703825	Transfer
39	F	????	WILD	WILD	VLISSINGE	12 Jul 1987	______	Transfer
					ROTTERDAM	9 Jul 1997	703826	Transfer
						9 Mar 2001		Death
40	?	13 Aug 1999	UNK1	UNK2	A07	13 Aug 1999	______	Hatch
					A19	1 Mar 2000	1	Transfer
41	?	28 Aug 1999	UNK1	UNK2	A07	28 Aug 1999	______	Hatch
					A19	1 Mar 2000	2	Transfer
42	?	8 Aug 2000	UNK1	UNK2	A07	8 Aug 2000	______	Hatch
					A19	1 Sep 2000	3	Transfer
43	?	12 Aug 2000	UNK1	UNK2	A07	12 Aug 2000	______	Hatch
					A19	1 Sep 2000	4	Transfer
48	?	21 Oct 1999	34	36	ROTTERDAM	21 Oct 1999	704297	Hatch
58	M	????	WILD	WILD	A23	30 Jul 2000	DONALD	Transfer
59	F	????	WILD	WILD	A23	30 Jul 2000	DAISY	Transfer
60	F	????	WILD	WILD	A23	30 Jul 2000	EUSEBI	Transfer
61	F	????	WILD	WILD	A23	30 Jul 2000	PAULA	Transfer
62	?	1 Aug 1998	UNK1	UNK2	A07	1 Aug 1998	______	Hatch
					A23	16 Sep 1999	TIC	Transfer
65	?	1 Aug 1998	UNK6	UNK7	A24	1 Aug 1998	______	Hatch
					A23	1 Jul 1999	TRIC	Transfer
66	?	1 Aug 1998	UNK6	UNK7	A24	1 Aug 1998	______	Hatch
					A23	1 Jul 1999	TRAC	Transfer
67	?	15 Mar 2001	MULT1	29	A02	15 Mar 2001	IV-1	Hatch
					A36	24 Feb 2002	______	Transfer
68	?	14 Jun 2001	MULT1	29	A02	14 Jun 2001	IV-2	Hatch
					A11	17 Feb 2002	______	Transfer
69	M	????	WILD	WILD	A23	5 Jul 2001	PLUTO	Transfer
70	M	????	WILD	WILD	A23	14 Jul 2001	OSCAR	Transfer
						1 Apr 2002		Death
71	F	????	WILD	WILD	LONDON RP	????	______	Transfer
					ROTTERDAM	23 Dec 2001	704781	Transfer
					A08	17 Nov 2004	______	Transfer
72	F	????	WILD	WILD	LONDON RP	????	______	Transfer
					ROTTERDAM	23 Dec 2001	704582	Transfer

73	?	????	WILD	WILD	LONDON RP	????	_____	Transfer
					ROTTERDAM	23 Dec 2001	704583	Transfer
79	?	6 May 2002	MULT1	29	A08	6 May 2002	_____	Hatch
80	?	26 Jul 2002	MULT1	29	A08	26 Jul 2002	_____	Hatch
81	?	~ Jan 2000	UNK8	UNK9	A32	~ Jan 2000	_____	Hatch
					A36	15 Aug 2002	_____	Transfer
					A36	~2004	_____	Death
82	?	~ Jan 2000	UNK8	UNK9	A32	~ Jan 2000	_____	Hatch
					A36	15 Aug 2002	_____	Transfer
83	F	~ 1996	UNK10	UNK11	A38	~ 1996	_____	Hatch
					A23	1 Aug 2002	TAMARA	Transfer
					A23	17 Jan 2004	TAMARA	Death
84	?	8 Jun 2002	MULT1	29	A08	8 Jun 2002	_____	Hatch
85	M	~1980	WILD	WILD	A22	10 Sep 2002	_____	Transfer
					A22	~2004	_____	Death
86	?	28 Oct 2000	UNK1	UNK2	A39	16 Jul 2002	_____	Transfer
87	?	29 Aug 2001	UNK1	UNK2	A39	16 Jul 2002	_____	Transfer
88	?	19 Jun 2003	MULT1	29	A08	19 Jun 2003	_____	Hatch
89	?	18 Jul 2003	MULT1	29	A08	18 Jul 2003	_____	Hatch
90	?	8 Aug 2003	MULT1	29	A08	8 Aug 2003	_____	Hatch
91	?	31 Aug 2003	MULT1	29	A08	31 Aug 2003	_____	Hatch
93	?	09 Jun 2004	MULT1	29	A08	09 Jun 2004	_____	Hatch
94	?	17 Jun 2004	MULT1	29	A08	17 Jun 2004	_____	Hatch
95	?	04 Jul 2004	MULT1	29	A08	04 Jul 2004	_____	Hatch
96	F	????	WILD	WILD	A22	27 Dec 2004	_____	Transfer
97	M	????	WILD	WILD	A22	27 Dec 2004	_____	Transfer
98	?	04 May 2004	58	60	A23	04 May 2004	KNIRPS	Hatch
101	?	~2000	UNK8	UNK9	A32	~2000	_____	Hatch
					A36	10 Dec 2004	_____	Transfer
102	?	02 Jun 2004	34	36	ROTTERDAM	02 Jun 2004	_____	Hatch

Totals: 19.16.29 (64)

b) Pyxis arachnoides brygooi

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
6	?	????	WILD	WILD	A04	19 Sep 1998	_____	Transfer
						~15 Aug 2002		Death
7	?	????	WILD	WILD	A04	19 Sep 1998	_____	Transfer
8	?	????	WILD	WILD	A04	19 Sep 1998	_____	Transfer
						~15 Aug 2002		Death
9	?	????	WILD	WILD	A04	19 Sep 1998	_____	Transfer
						~15 Aug 2002		Death
30	M	????	WILD	WILD	ROTTERDAM	14 Jan 1991	702004	Transfer
					A03	4 Jan 1995	HZ0305	Loan to
31	F	????	WILD	WILD	ROTTERDAM	14 Jan 1991	702005	Transfer
					A03	4 Jan 1995	HZ0306	Loan to
32	?	10 Oct 1994	30	31	ROTTERDAM	10 Oct 1994	703152	Hatch
					A03	25 Apr 1998	HZ0539	Loan to
49	F	????	WILD	WILD	ROTTERDAM	????	_____	Transfer
					A03	21 Jun 1998	HZ0561	Loan to
50	?	1 Jul 1996	30	31	A03	1 Jul 1996	HZ0428	Hatch
51	?	27 Oct 1996	30	31	A03	27 Oct 1996	HZ0454	Hatch

52	?	14 May 1999	30	31	A03	14 May 1999	HZ0624	Hatch
53	?	7 Jun 1999	30	31	A03	7 Jun 1999	HZ0627	Hatch
54	?	19 Mar 2000	30	31	A03	19 Mar 2000	HZ0683	Hatch
55	?	12 May 2000	30	31	A03	12 May 2000	HZ0691	Hatch
56	M	????	WILD	WILD	A11	~ 1985	_____	Transfer
					A03	16 Oct 1999	HZ0664	Loan to
					A11	08 Nov 2003	_____	Transfer
57	F	????	WILD	WILD	A11	~ 1985	_____	Transfer
					A03	16 Oct 1999	HZ0665	Loan to
74	?	????	UNK1	UNK2	A10	10 Oct 2001	PABU01	Transfer
75	?	????	UNK1	UNK2	A10	10 Oct 2001	PABU02	Transfer
76	?	????	UNK1	UNK2	A10	10 Oct 2001	PABU03	Transfer
77	?	????	UNK1	UNK2	A10	10 Oct 2001	PABU04	Transfer
						15 Feb 2002	PABU04	Death
78	?	????	UNK1	UNK2	A10	10 Oct 2001	PABU05	Transfer
						01 Dec 2002	PABU05	Death
92	?	????	30	31	A03	03 May 2003	HZ0899	Hatch

Totals: 2.3.17 (22)

c) Pyxis arachnoides oblonga

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
13	?	24 Oct 1997	UNK1	UNK2	A06	24 Oct 1997	_____	Hatch
					A17	25 Jul 2000	_____	Transfer
14	?	28 May 1997	UNK1	UNK2	A06	28 May 1997	_____	Hatch
					A17	25 Jul 2000	_____	Transfer
15	?	26 Jun 1997	UNK1	UNK3	A06	26 Jun 1997	_____	Hatch
					A17	25 Jul 2000	_____	Transfer
16	?	27 Apr 1999	UNK1	UNK2	A06	27 Apr 1999	_____	Hatch
					A18	25 Jul 2000	_____	Transfer
17	?	20 Jul 1999	UNK1	UNK2	A06	20 Jul 1999	_____	Hatch
					A18	25 Jul 2000	_____	Transfer
99	M	31 Dec 1999	UNK12	UNK13	A40	21 Jul 2004	_____	Transfer
100	M	31 Dec 1999	UNK12	UNK13	A40	21 Jul 2004	_____	Transfer

Totals: 1.1.5 (7)

Appendix 1

Husbandry conditions and additional information per location

The information below is an update on the information presented in appendix 1 of the previous annual report.

Location A40
Terrarium : 200 x 80 x 70 cm (LxWH)
Lighting : 1 daylight tubelight, 2 spotlight (both at one end of the enclosure). Temperature under the lamps may reach 38°C whil the other end reaches 28°C. One OsramUltra Vitalight UVB lamp which is switched on for half an hour in the morning and 15 minutes during the afternoon.
During the summertime the lights are switched on for 14 hours, which is reduced to 10 hours (first week of November). From the beginning of March, the lighting period is increased again.
Care : No spraying during the resting period. During the summer, the terrarium is sprayed every day. The substrate consists of plain building sand (depth 20 cm.). Furthermore, there is dry wood, rocks and dried bamboo which provide hiding places. In one corner of the enclosure a madagascar palm (Pachypodium lamerti) is planted.
Food is provided on daily basis (wild herbs, grasses, salade, endive and some fruit). Once a week some vitamins are added (calcicare+). During the resting period, no food is offered.