Studbook Breeding Programme Pyxis arachnoides

Studbook
Breeding Programme
Pyxis arachnoides

Annual Report 2005

Frank Van Loon January 2006

CONTENTS

Introduction and activities in 2005	6
1.1.Introduction	. 6
1.2.Internet site	. 6
1.3.Presentations and publications.	. 6
No publications or presentations were given by studbookparticipants during 2005	6
1.4.Contacts.	. 6
In 2005 the search for interested keepers was continued. Several new locations were found interested in the studbook and so far two new locations were found willing to register their animals. The coordinator is very pleased with the fact that one of these new locations has the subspecies Pyxis arachnoides brygooi. Also very pleasant to know is that 3 animals from location A19 (who has not been very cooperative, no response was given duringe several years despite numerous mails) have "re-entered" the studbook via a new location	6
PLANS FOR ACTIVITIES IN 2006	7
2.1.Internet site	. 7
CURRENT LIVING STUDBOOK POPULATION	8
IMPORTS, BIRTHS AND DEATHS	14

APPENDIX HUSBANDRY CONDITIONS AND ADDITIONAL INFORMATION PER LOCATION

Frank Van Loon

Pyxis-arachnoides@studbooks.org
Franktortoises@hotmail.com

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.

INTRODUCTION AND ACTIVITIES IN 2005

1.1.Introduction

This report is an update of the annual report of the Studbook Breeding Programme *Pyxis arachnoides* published in 2004. 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 2005, plans for 2006, 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 ESF (European Studbook Foundation) or from the studbook co-ordinator.

In the following sections, an overview of the main activities in 2005 is presented.

1.2.Internet site

The internet site of the Studbook Breeding Programme *Pyxis arachnoides* hasn't undergone any changes and also has not been updated or managed. The site will be closed down. More info on this topic in chapter 2. plans for activities in 2006.

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.

1.3. Presentations and publications

No publications or presentations were given by studbookparticipants during 2005.

1.4.Contacts

In 2005 the search for interested keepers was continued. Several new locations were found interested in the studbook and so far two new locations were found willing to register their animals. The coordinator is very pleased with the fact that one of these new locations has the subspecies *Pyxis arachnoides brygooi*. Also very pleasant to know is that 3 animals from location A19 (who has not been very cooperative, no response was given duringe several years despite numerous mails) have "reentered" the studbook via a new location.

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*.

PLANS FOR ACTIVITIES IN 2006

The website http://home.kabelfoon.nl/~loehr/pyxis will be shut down because it is not managed. The information that still is valuable for the stubook will be inserted in the studbook site of the ESF.

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).

The studbook report of 2004 mentioned the transfer of the studbook coordinators' adult couple to location A08 and the improvement in egg-laying. No more than three hatchlings were produced the previous year.

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. But is has to be clear that the aim is not to find as many new locations as possible but to find as many interested and willing locations as possible. By this, I mean locations that active take part in the studbook (eg. report changes, report the sex of hatchlings as soon as possible,...).

2.1.Internet site

In 2006, the internet site of the Studbook Breeding Programme *Pyxis arachnoides* will be shut down, as mentioned above. The studbook co-ordinator will see what information still is valuable for the studbook and/or for the keepers/breeders of the species. This will be inserted in the next studbook report and/or will be put on the internet site of the European Studbook Foundation.

2.2. 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.

CURRENT LIVING STUDBOOK POPULATION

The total number of registered live specimens *P. arachnoides* increased to 93. No specimens died, and 8 were born at two locations. Nine specimens were acquired from outside the studbook. The specimens are currently housed at 16 locations (15 in 2004) in the Netherlands (8), Belgium (2) 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 2005 are related to subspecies Pyxis a. arachnoides and 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

n: A08								
Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event	
М	????	WILD			~ Jan 1995 4 Sep 2002	704790	Transfer Loan to Transfer	
М	????	WILD	WILD	A05 A10 A08			Transfer Transfer Loan to	
F	????	WILD	WILD	A05 A10 A08			Transfer Transfer Loan to	
М	????	WILD	WILD	A11 A02 A08	29 Dec 1999	I	Transfer Loan to Loan to	
М	????	WILD	WILD	A11 A02 A08	29 Dec 1999	II	Transfer Loan to Loan to	
F	????	WILD	WILD	A11 A02 A08	29 Dec 1999	IV	Transfer Loan to Loan to	
F	????	WILD	WILD	LONDON RP ROTTERDAM A08			Transfer Transfer Loan to	
?	26 Jul 2002	MULT1	29	A08	26 Jul 2002		Hatch	
?	08 Aug 2003	MULT1	29	80A	08 Aug 2003		Hatch	
?	09 Jun 2004	MULT1	29	80A	09 Jun 2004		Hatch	
?	15 Apr 2005	MULT1	29	A08	15 Apr 2005		Hatch	
?	15 Apr 2005	23	24	80A	15 Apr 2005		Hatch	
?	09 Jun 2005	MULT1	29	80A	09 Jun 2005		Hatch	
?	07 Jul 2005	MULT1	29	A08	07 Jul 2005		Hatch	
?	06 Jul 2005	23	24	80A	06 Jul 2005		Hatch	
?	04 Sep 2005	MULT1	29	80A	04 Sep 2005		Hatch	
?	15 Sep 2005	23	24	80A	15 Sep 2005		Hatch	
	M M M F F P P P P P P P P P P P P P P P	M ???? F ???? O9 Jun 2004 P 15 Apr 2005 P 09 Jun 2005	M ???? WILD F ???? WILD 10 Jul 2002 MULT1 11 Apr 2005 MULT1 12 06 Jul 2005 MULT1 13 Apr 2005 MULT1 15 Apr 2005 MULT1 16 Jul 2005 MULT1 17 06 Jul 2005 MULT1 18 06 Jul 2005 MULT1 20 06 Jul 2005 MULT1 20 06 Jul 2005 MULT1	M	M	Sex Hatch Date Sire Dam Location Date	Sex Hatch Date Sire Dam Location Date Local ID	Noverline

Totals: 4.3.10 (17)

Location: A10

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

Totals: 0.0.2 (2)

Location: All

======= Stud # =======	====== Sex ======	==== Hato =====	ch I	===== Date ======	====== Sire =======	===== Dam =====	:===: :===:	Location	== D	=== ate ===	==== : :===	:==== 	 Local ID 	Event
68	?	14 J	Jun	2001	MULT1		29	A02 A11					IV-2	Hatch Transfer
88	?	19 J	Jun	2003	MULT1		29	A08 A11						Hatch Transfer
89	?	18 J	Jul	2003	MULT1		29	A08 A11						Hatch Transfer
91	?	31 <i>I</i>	Aug	2003	MULT1		29	A08 A11			_			Hatch Transfer
94	?	17 J	Jun	2004	MULT1		29	A08 A11						Hatch Transfer
95	?	04 J	Jul	2004	MULT1		29	A08 A11						Hatch Transfer

Totals: 0.0.5 (5)

Location: A19

Stud #	===== Sex	===== Hatch 	Date	====== Sire	Dam	Location	======================================		Local ID	Event	=
40	?	13 Aug	1999	UNK1	UNK2	A07 A19	13 Aug 1 Mar		1	Hatch Transfer	1?

Totals: 0.0.1 (1)

Location: A22

====	====	=====	===:	====	=====:	=======	======	========	===	====:	====:	========	=======	=
Stud	#	Sex	Hat	tch 1	Date	Sire	Dam	Location	Da	te		Local ID	Event	
====	====	=====	===:	====	=====	======	======	=======	===	====:	=====			=
	1	M	9	Sep	1996	UNK1	UNK 2	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	UNK 2	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									
Stud #	Sex	Hatch Date	Sire	Dam	Location	Date		Local ID	Event
58	М	????	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
69	М	????	WILD	WILD	A23	5 Jul	2001	PLUTO	Transfer
98	?	04 May 2004	58	60	A23	5 May	2004	KNIRPS	Hatch
otals:	2.3.1	(6)							
ocation									
		Hatch Date	====== Sire	 Dam	Location	======= Date		Local ID	Event
======	=====	:========	======	======	=======	======		=======	=======
4	М	????	WILD	WILD	A04 A32	17 May 25 May			Transfer Loan to
otals:	1.0.0	(1)							
ocation	: A36								
stud #	Sex	Hatch Date	Sire		Location			Local ID	Event
67	?	15 Mar 2001	MULT1		A02 A36	15 Mar	2001		Hatch Transfer
82	?	~ Jan 2000	UNK8	UNK9		~ Jan	2000		Hatch Transfer
101	?	~2000	UNK8	UNK9		,	-2000		Hatch Transfer
otals:	0.0.3	(3)							
ocation	: A39								
===== tud #		Hatch Date	====== Sire	====== Dam	Location	======= Date	: 	 Local ID	======================================
86	?	28 Oct 2000	UNK1	UNK 2	A07 A39	28 Oct 16 Jul	2000 2002		Hatch Transfer
87	?	29 Aug 2001	UNK1	UNK 2	A07 A39	29 Aug 16 Jul	2001 2002		Hatch Transfer
otals:	0.0.2	(2)							
ocation									
Stud #	Sex	Hatch Date	Sire	Dam	Location	Date		Local ID	Event
:======	:=====	========	======	======	=======	======	====	=======	=======
20	М	????	WILD	WILD	WASS BR C	8 Dec 17 Apr	1990 2002	704725	Transfer Transfer
34	М	????	WILD	WILD	ROTTERDAM	7 Jun	1997	703791	Transfer
35	M	????	WILD	WILD	ROTTERDAM	7 Jun	1997	703792	Transfer
55						7 Tun	1997	703793	m
	F	????	WILD	WILD	ROTTERDAM	/ Juli			Transfer
		????	WILD	WILD	ROTTERDAM ROTTERDAM				
36			WILD	WILD		7 Jun 12 Jul	1997 1987	703794	
36 37	F M	????	WILD	WILD	ROTTERDAM VLISSINGE	7 Jun 12 Jul 9 Jul	1997 1987 1997	703794 703825	Transfer Transfer Transfer

					ROTTERDAM	23 Dec 2001	704582	Transfer	3
73	?	????	WILD	WILD	LONDON RP ROTTERDAM		704583	Transfer Transfer	6
102	?	02 Jun 20	04 34	36	ROTTERDAM	02 Jun 2004	705088	Hatch	7
Totals:	4.4.3	(11)							
Location		_				:========			_
Stud #	Sex	Hatch Dat	e Sire	Dam	Location		Local ID	Event	
19	М	????				8 Dec 1990			
Totals:	1.0.0	(1)							
Location						.=====			
Stud #	Sex	Hatch Dat	e Sire	Dam	Location		Local ID	Event	
									=
41	?	28 Aug 19	99 UNK1	UNK2	A07 A19	28 Aug 1999 1 Mar 2000		Hatch Transfer	1?
42	?	8 Aug 20	00 UNK1	UNK 2	A07 A19	8 Aug 2000 1 Sep 2000		Hatch Transfer	1?
43	?	12 Aug 20	00 UNK1	UNK 2	A07 A19	12 Aug 2000 1 Sep 2000		Hatch Transfer	1?
107	?	09 Aug 20	01 UNK1	UNK2	A07 A42	09 Aug 200 23 Jul 200		Hatch Transfer	
108	?	25 Jul 20	01 UNK1	UNK2	A07 A42	25 Jul 200 23 Jul 200		Hatch Transfer	
109	?	09 Aug 20	01 UNK1	UNK2	A07 A42	09 Aug 200 23 Jul 200		Hatch Transfer	
110	?	19	65 WILD	WILD	A42	28 Sep 200	2 P004	Transfer	

As mentioned is the previous studbook report, Location A22 transferred 5 juvenile animals to Location A11, due to the agreement between the two participants.

Solitary males fit for breeding are present at locations A08 (specimen 26 or 27, although one male is very old and shows no observed mating behaviour in the group), 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. Location A32 does not want to register the other animals kept at this location.

Location WASS BR C has not given a reply for some time, the studbook co-ordinator will try to find out whether this participant still is keeping the animal.

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).

b) Pyxis arachnoides brygooi

Location: A03

=======		========	======	======	========	====				=======	=
Stud #	Sex	Hatch Date	Sire	Dam	Location	Dat	ce		Local ID	Event	
=======	=====	========	======	======	========	====			=======	=======	=
30	М	????	WILD	WILD	ROTTERDAM A03				702004 HZ0305	Transfer Loan to	1
31	F	????	WILD	WILD	ROTTERDAM A03				702005 HZ0306	Transfer Loan to	1
32	F	11 Nov 1994	30	31	ROTTERDAM A03				703152 HZ0539	Hatch Loan to	2
49	F	????	WILD	WILD	ROTTERDAM A03	21	???? Jun		HZ0561	Transfer Loan to	1
50	M	1 Jul 1996	30	31	A03	1	Jul	1996	HZ0428	Hatch	3
52	М	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	нz0899	Hatch	

Totals: 3.4.3 (10)

Location: A10

Stud #	Sex	Hatch Date	Sire D	oam	Location	Date	Local ID	Event	
74	M	????	UNK1	UNK2	A10	10 Oct	2001 Pabm02	Transfer	1
75	?	????	UNK1	UNK2	A10	10 Oct	2001 Pabu02	Transfer	2
76	M	????	UNK1	UNK2	A10	10 Oct	2001 Pabm01	Transfer	1

Totals: 2.0.1 (3)

Location: All

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
56	М	????	WILD	WILD	A11 A03 A11	16 Oct	~1985 t 1999 HZ0664 v 2003	Transfer Loan to Transfer

Totals: 1.0.0 (1)

Location: A41

Stu	===== d #	Sex	Hatch	date	Sire	Dam	Locatior	1	Dat	:==== :e		Local	ID	Event	
	103	M		1998	WILD	WILD	A41		80	Aug	2004	Nigma		Transfer	
	104	F		1998	WILD	WILD	A41		80	Aug	2004	Atea		Transfer	
	105	F		1992	WILD	WILD	A41		17	Apr	2005	Zora		Transfer	
	106	?	10 Jul	L 2005	103	104	A41		10	Jul	2005	nakwee	k1	Hatch	

Totals: 1.2.1 (4)

The situation for the subspecies *Pyxis arachnoides brygooi* has slightly altered. A new location has registered not only new animals but also a captive bred specimen. Nevertheless it remains important that location A03, with its captive bred offspring, should consider spreading specimen (for example to form a possible breeding pair with one of the males of location A10 or with the new hatchling 106 at Location A41).

c) Pyxis arachnoides oblonga

Location: A17

										_
Stud #	Sex	Hatch I	Date	Sire	Dam	Location	Date	Local ID	Event	_
13	?	24 Oct	1997	UNK1	UNK2	A06 A17	24 Oct 199° 25 Jul 2000		Hatch Transfer	1?
14	?	28 May	1997	UNK1	UNK 2	A06 A17	28 May 199 25 Jul 2000		Hatch Transfer	1?
15	?	26 Jun	1997	UNK1	UNK3	A06 A17	26 Jun 199 25 Jul 2000		Hatch Transfer	1?

Totals: 0.0.3 (3)

Location: A40

======================================	Sex	Hatch Date	======= Sire	Dam	Location	======= Date 	Local ID	Event
16	F	27 Apr 1999	UNK1	UNK 2	A06 A18 A40	27 Apr 199 25 Jul 200 06 Feb 200	0	Hatch Transfer Transfer
17	М	20 Jul 1999	UNK1	UNK 2	A06 A18 A40	20 Jul 199 25 Jul 200 06 Feb 200	0	Hatch Transfer Transfer
99	M	31 Dec 1999	UNK12	UNK13	A40	21 Jul 200	4	Transfer
100	M	31 Dec 1999	UNK12	UNK13	A40	21 Jul 200	4	Transfer

Totals: 3.1.0 (2)

Location A18 has transferred his animals to location A40, the male (studbooknumber 17) had no interest in the female (studbooknumber 16) at the previous location. So far, three eggs were laid at location A18. This could prove to be a new breeder of this subspecies.

Location A17 has not been very responsive the past few years.

Overall, the situation still is very worrisome. It is of importance to acquire additional founder specimens in the studbook.

IMPORTS, BIRTHS AND DEATHS

Imports of *P. arachnoides*, organised by the Studbook Breeding Programme *Pyxis arachnoides*, did not take place in 2005. Plans to import small numbers of *P. a. brygooi* and *P. a. oblonga* might be supported by the programme if the future should prove that no additional keepers/breeders of these subspecies are found.

Two subspecies were bred in 2005, *Pyxis arachnoides arachnoides* (7 at location A08) and Pyxis arachnoides brygooi (1 at location A41).

Table II: Births of P. arachnoides in 2004.

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

====== Stud #	Sex	Hatch	1 Da	===== ate	Sire	Dam		Location		Dat	==== :e	 	Local	ID	Event	
112	2	15 Ar	or :	2005	MTIT.TT1		29	A08		15	Anr	2005			Hatch	4
		-			23			A08			-			_	Hatch	
					MULT1			A08			-			-	Hatch	
115	?	07 Jı	ıl 2	2005	MULT1			A08						-	Hatch	4
116	?	06 Jı	ıl 2	2005	23		24	A08		06	Jul	2005		_	Hatch	4
117	?	04 Se	ep 2	2005	MULT1		29	A08		04	Sep	2005		_	Hatch	4
118	?	15 Se	ep 2	2005	23		24	A08		15	Sep	2005		_	Hatch	4

Totals: 0.0.7 (7)

No Pyxis died in 2005

Table III: Deaths of P. arachnoides in 2005.

a) Pyxis arachnoides arachnoides

=======================================	=======================================		=======================================	=======================================
Stud # Sex Ha	atch Date Sire	Dam	Location Date	Local ID Event
============	=======================================		=================	=======================================

Totals: 0.0.0 (0)

b) Pyxis arachnoides brygooi

Stud # Sex Hatch Date Sire Dam	Location Date Local ID Event

Totals: 0.0.0 (0)

c) Pyxis arachnoides oblonga

Stud # Sex Hatch Date Sire Dam	Location Date Local ID Event

Totals: 0.0.0 (0)

5. TOTAL STUDBOOK POPULATION AND FUTURE PERSPECTIVES

The current total registered studbook population consists of 109 specimens: 76 *P. a. arachnoides*, 7 *P. a. oblonga*, and 26 *P. a. brygooi*. From these, 41 are wild-caught specimens and 68 are captive-bred. Captive-bred specimens of all three subspecies are present. All but 16 tortoises are currently alive, housed at 16 (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* could 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 2005, 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*.

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

======		========	======		=======	========		========
		Hatch Date						
======	=====	========	======	======	:=======	=======	=======	=======
1	M	9 Sep 1996	UNK1	UNK 2	A07	9 Sep 199	5	Hatch
					A02	22 Nov 1998	3 960909	Loan to
					A22	24 Feb 2001	L	Loan to
2	म	16 Nov 1996	IINK 1	IINK 2	A07	16 Nov 199	5	Hatch
-	-	10 1.01 1330	011112	011112	A02	22 Nov 1998		Loan to
					A22	24 Feb 2001		Loan to
					AZZ	21 100 200.		Loan co
3	M	16 Sep 1997	UNK1	UNK 2	A07	16 Sep 199'	7	Hatch
					A02	22 Nov 1998	3 970916	Loan to
					A22	24 Feb 200	L	Loan to
4	М	????	WILD	WILD	A04	17 May 1999) III.T	Transfer
-	1.1	• • • •	WILD	WILD	A32	25 May 200	2 ULI	Loan to
					AJZ	25 May 200.	. 0111	Loan co
5	F	????	WILD	WILD	A04	17 May 1999	9 ESTHER	Transfer
						30 Jun 200	L	Death
1.0		0000			7.00	- 100	_	
18	M	????	WILD	MILD		~ Jan 199!		Transfer
						4 Sep 2003		Loan to
					A08	17 Nov 200	±	Transfer
19	M	????	WILD	WILD	WASS BR C	8 Dec 1990) DAMAGE	Transfer
						0 - 100		
20	M	????	WILD	WILD		8 Dec 1990		Transfer
					ROTTERDAM	17 Apr 200	2 704725	Transfer
21	F	????	WILD	WILD	WASS BR C	8 Dec 1990)	Transfer
	-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,		17 Apr 200		Transfer
						13 Jun 200		Death
					110111111111	10 0 411 200	, , , , , , ,	204011
22	M	????	WILD	WILD		????		Transfer
					A10	28 Jun 1999	PAAM1	Transfer
						26 Sep 2003		Death
23	М	????	WILD	M11M	A05	????		Transfer
23	1.1	• • • •	***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	A10	28 Jun 1999		Transfer
						20 0 0011 199.		110110101
24	F	????	WILD	WILD	A05	????		Transfer

					A10	28	Jun	1999	PAAF1	Transfer
25	?	2 Sep 1999	UNK3	24	A05 A10	18	Sep		PAAU1	Hatch Transfer Death
26	М	????	WILD	WILD	A11 A02 A08	29	Dec	1999	I	Transfer Loan to Loan to
27	М	????	WILD	WILD	A11 A02 A08		Dec	1999		Transfer Loan to Loan to
28	F	????	WILD	WILD	A11 A02 A08	31	Dec Dec	1985 1999 2000 2002	III	Transfer Loan to Loan to Death
29	F	????	WILD	WILD	A11 A02 A08		Dec	1999	IV	Transfer Loan to Loan to
33	M	????	WILD	WILD	ROTTERDAM LONDON RP	11	Aug			Transfer Loan to Death
34	M	????	WILD	WILD	ROTTERDAM	7	Jun	1997	703791	Transfer
35	М	????	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 ROTTERDAM					Transfer Transfer
39	F	????	WILD	WILD	VLISSINGE ROTTERDAM	9	Jul		703826	Transfer Transfer Death
40	?	13 Aug 1999	UNK1	UNK2	A07 A19			1999 2000	1	Hatch Transfer
41	?	28 Aug 1999	UNK1	UNK2	A07 A19				2	Hatch Transfer
42	?	8 Aug 2000	UNK1	UNK 2	A07 A19	8	Aug Sep	2000 2000	3	Hatch Transfer
43	?	12 Aug 2000	UNK1	UNK 2	A07 A19				4	
48	?	21 Oct 1999	34	36	ROTTERDAM	21	Oct	1999	704297	Hatch
58	М	????	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	UNK 2	A07 A23	1 16	Aug Sep	1998 1999	TIC	Hatch Transfer
65	?	1 Aug 1998	UNK6	UNK7	A24 A23	1 1	Aug Jul	1998 1999	TRIC	Hatch Transfer
66		1 Aug 1998			A23	1	Jul	1999	TRAC	Transfer
67	?	15 Mar 2001	MULT1	29	A02 A36					Hatch Transfer
68	?	14 Jun 2001	MULT1	29	A02 A11					
69	М	????	WILD	WILD	A23	5	Jul	2001	PLUTO	Transfer
70	M	????	WILD	WILD	A23			2001 2002	OSCAR	Transfer Death

71	F	????	WILD	WILD	LONDON RP ROTTERDAM A08	???? 23 Dec 2001 704781 17 Nov 2004	Transfer Transfer Transfer
72	F	????	WILD	WILD	LONDON RP ROTTERDAM	???? 23 Dec 2001 704582	Transfer Transfer
73	?	????	WILD	WILD	LONDON RP ROTTERDAM	????	Transfer Transfer
79	?	6 May 2002	MULT1	29	A08 A10	6 May 2002 24 Sep 2005	Hatch Transfer
80	?	26 Jul 2002	MULT1	29	A08	26 Jul 2002	Hatch
81	?	~ Jan 2000	UNK8	UNK9	A32 A36 A36	~ Jan 2000 15 Aug 2002 ~2004	Hatch Transfer Death
82	?	~ Jan 2000	UNK8	UNK9	A32 A36	~ Jan 2000 15 Aug 2002	Hatch Transfer
83	F	~ 1996	UNK10	UNK11	A38 A23 A23	~ 1996 1 Aug 2002 TAMARA 17 Jan 2004 TAMARA	Hatch Transfer Death
84	?	8 Jun 2002	MULT1	29	A08 A10	8 Jun 2002 24 Sep 2005	Hatch Transfer
85	M	~1980	WILD	WILD	A22 A22	10 Sep 2002 ~2004	Transfer Death
86	?	28 Oct 2000	UNK1	UNK 2	A39	16 Jul 2002	Transfer
87	?	29 Aug 2001	UNK1	UNK2	A39	16 Jul 2002	Transfer
88	?	19 Jun 2003	MULT1	29	A08 A11	19 Jun 2003 22 Jan 2005	Hatch Transfer
89	?	18 Jul 2003	MULT1	29	A08 A11	18 Jul 2003 22 Jan 2005	Hatch Transfer
90	?	8 Aug 2003	MULT1	29	A08	8 Aug 2003	Hatch
91	?	31 Aug 2003	MULT1	29	A08 A11	31 Aug 2003 22 Jan 2005	Hatch Transfer
93	?	09 Jun 2004	MULT1	29	A08	09 Jun 2004	Hatch
94	?	17 Jun 2004	MULT1	29	A08 A11	17 Jun 2004 22 Jan 2005	Hatch Transfer
95	?	04 Jul 2004	MULT1	29	A08 A11	04 Jul 2004 22 Jan 2005	Hatch Transfer
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 A36	~2000 10 Dec 2004	Hatch Transfer
102	?	02 Jun 2004	34	36	ROTTERDAM	02 Jun 2004	Hatch
107	?	09 Aug 2001	UNK1	UNK2	A07 A42	09 Aug 2001 23 Jul 2002 STRICH	Hatch Transfer
108	?	25 Jul 2001	UNK1	UNK2	A07 A42	25 Jul 2001 23 Jul 2002 GROSSE	Hatch Transfer
109	?	09 Aug 2001	UNK1	UNK2	A07 A42	09 Aug 2001 23 Jul 2002 KLETTE	Hatch Transfer
110	?	1965	WILD	WILD	A42	28 Sep 2002 P004	Transfer
112	?	15 Apr 2005	MULT1	29	A08	15 Apr 2005	Hatch 4
113	?	15 Apr 2005	23	24	A08	15 Apr 2005	Hatch 4
114	?	09 Jun 2005	MULT1	29	80A	09 Jun 2005	Hatch 4

115	?	07 Jul 2005	MULT1	29	80A	07 Jul 2005 Hatch	4
116	?	06 Jul 2005	23	24	80A	06 Jul 2005 Hatch	4
117	?	04 Sep 2005	MULT1	29	A08	04 Sep 2005 Hatch	4
118	?	15 Sep 2005	23	24	A08	15 Sep 2005 Hatch	4

Totals: 19.16.40 (75)

b) Pyxis arachnoides brygooi

Stud #	Sex	Hat	tch Date	Sire	Dam	Location	Dat	te		Local ID	======= Event =======
6	?		????	WILD	WILD	A04		_	1998 2002		Transfer Death
7	?		????	WILD	WILD	A04	19	Sep	1998		Transfer
8	?		????	WILD	WILD	A04			1998 2002		Transfer Death
9	?		????	WILD	WILD	A04			1998 2002		Transfer Death
30	М		????	WILD	WILD	ROTTERDAM A03				702004 HZ0305	Transfer Loan to
31	F		????	WILD	WILD	ROTTERDAM A03				702005 HZ0306	Transfer Loan to
32	?	10	Oct 1994	30	31	ROTTERDAM A03				703152 HZ0539	Hatch Loan to
49	F		????	WILD	WILD	ROTTERDAM A03				HZ0561	Transfer 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	М		????	WILD	WILD	A11 A03 A11		Oct	1999	HZ0664	Transfer Loan to Transfer
57	F		????	WILD	WILD	A11 A03	16			HZ0665	Transfer Loan to
74	M		????	UNK1	UNK2	A10	10	Oct	2001	Pabm02	Transfer
75	?		????	UNK1	UNK 2	A10	10	Oct	2001	PabU02	Transfer
76	M		????	UNK1	UNK 2	A10	10	Oct	2001	Pabm01	Transfer
77	?		????	UNK1	UNK 2	A10				PABU04 PABU04	Transfer Death
78	?		????	UNK1	UNK 2	A10				PABU05 PABU05	Transfer Death
92	?		????	30	31	A03	03	May	2003	HZ0899	Hatch
103	М		1998	WILD	WILD	A41	08	Aug	2004	Nigma	Transfer
104	F		1998	WILD	WILD	A41	08	Aug	2004	Atea	Transfer
105	F		1992	WILD	WILD	A41	17	Apr	2005	Zora	Transfer

106 ? 10 Jul 2005 103 104 A41 10 Jul 2005 nakweek1 Hatch

Totals: 5.5.16 (26)

c) Pyxis arachnoides oblonga

======	=====					:=====================================	======================================
Stua #	sex	Hatch Date	Sire	n Location	Date	======================================	Event
13	?	24 Oct 1997	UNK1 (UNK2 A06 A17	24 Oct 1997 25 Jul 2000		Hatch Transfer
14	?	28 May 1997	UNK1 (UNK2 A06 A17	28 May 1997 25 Jul 2000		Hatch Transfer
15	?	26 Jun 1997	UNK1 (JNK3 A06 A17	26 Jun 1997 25 Jul 2000		Hatch Transfer
16	F	27 Apr 1999	UNK1 (UNK2 A06 A18 A40	27 Apr 1999 25 Jul 2000 06 Feb 2009)	Hatch Transfer Transfer
17	М	20 Jul 1999	UNK1 (UNK2 A06 A18 A40	20 Jul 1999 25 Jul 2000 06 Feb 2009)	Hatch Transfer Transfer
99	М	31 Dec 1999	UNK12 UN	NK13 A40	21 Jul 2004	1	Transfer
100	M	31 Dec 1999	UNK12 UN	NK13 A40	21 Jul 2004	1	Transfer

Totals: 3.1.3 (7)

Appendix 1

Husbandry conditions and additional information per location