

Western Hermann's Tortoise
(Testudo hermanni hermanni)
North American Regional Studbook

3rd Edition, 2015



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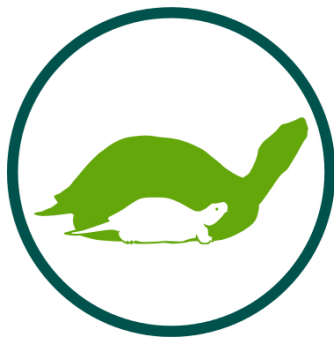
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LETTER FROM THE COORDINATOR

We've covered some distance in just a few short years with our *Testudo hermanni hermanni* project. Of course, none of this would be within the realms of possibility without the help and skill of Steve Enders who has made the continued survival of this studbook feasible. The focus to segregate the animals in this studbook from all other Hermann's tortoises currently being kept in the United States was taken seriously by all parties involved and, so far, we have achieved pleasing results. This chelonian, considered Endangered by the IUCN Redlist, has been largely ignored worldwide for years as it was considered by many to be nothing more than just a "prettier Hermann's tortoise". The community chose to direct their attention to the ever so popular species that have now oversaturated the industry to the point where they are extremely easy to obtain. Star tortoises, leopard tortoises and red-footed tortoises (to name a few) have become a primary focal point while others fell just short or entirely disappeared from the clique's radar. *Testudo hermanni hermanni* was one of the forgotten until now.

My life's work has been resurrecting what had become lost of this species in the USA while going full steam ahead with bringing in new, legitimate blood. The entire process was anything but easy, yet here we are today with a wonderful group of animals that fully represent the western Hermann's tortoise in the purest, "textbook" way. The acquisition of locality specific colonies from areas throughout their native range played a huge role in this entire collaborative undertaking. Several locales of this tortoise occur in Italy, France and Spain – each with their own unique, yet sometimes ill-defined traits. It takes a trained eye to fully see the differences in tortoises from various geographic ranges. This is something I have come to know quite well at this stage of the game. I have scoured every piece of photographic and written material across the board to truly be able to fully recognize a specimen from a particular area. With the majority of *T. hermanni hermanni* in this country residing at my facility, I have been able to see them in the flesh on a daily basis. This comes with many challenges and although some of us have publicized and surfaced valuable information pertaining to proper identification, we are still deceived on a regular basis by the one true impediment which is variation. Variation is everywhere. It exists in everything we do as humans, everything we see and it certainly surrounds nature. In fact, it's what nature is all about. Hermann's tortoises vary from subspecies to subspecies and even within given populations of an individual subspecies. This can result in major obstructions when attempting to correctly place an individual in a proposed group. We know where the tortoises in this book come from, or do we?

That question weighed on me heavily and after spending weeks, days, months, even years burying myself in information on the subject, it became apparent that nothing would prove out without genetic testing. DNA, the building block of life, is where much of the truth lies. When dealing with such a sorely understood tortoise as the western Hermann's tortoise, genetic testing could really open doors to what separates the populations from one another even though they are all contemporaneously assigned to the same valid taxa. This kind of research is almost never done by tortoise enthusiasts across the globe, but a few who are bedeviled enough to attempt it

do exist and I decided to be one of them. When Bill Zovickian expressed interest in doing such a task with his own *T. h. hermanni* during an extended correspondence with me, it hatched a whole new chapter for this studbook and the project as a whole. With cooperation from Omaha's Henry Doorly Zoo, their genetics department, and my trusted veterinarian Dr. Barry Adler, almost every single tortoise in this studbook was taken in for DNA sampling. My incredibly supportive wife and I spent hours on end at Barry's practice carefully extracting blood samples from dozens of fussy western Hermann's tortoises which were then sent off to the lab for testing. We kept immaculate records and notes to be absolute positive that each animal and its sample were correctly labeled to avoid potential mass confusion down the road.

The process couldn't have gone any better and I am happy to report that the results are in. I cannot say I'm all that surprised though. There was never a worry as to the purity of these tortoises, only a few concerns on their history or origins. Much of that has all been cleared up now with beautiful ramifications and we are now fortunate enough to know even more about these special animals. We've taken this new information to make some changes to the book and its management. In the year to come, I will personally be compiling my notes, the entire genetic report, and all other criteria to publish our report on the findings and specifics of the western Hermann's tortoises belonging to the North American Regional Studbook. Perhaps a complete book regarding these animals is on my horizon.

For now, you may also notice a few changes – births, deaths, and transfers – which are part of the expected process of running a studbook and help make this type of project what it is. It should not go without mention that we are all still learning. We will always be learning. There are no experts in the chelonian community, only students. The animals are the teachers.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chris Leone', with a stylized, cursive script.

Chris Leone

Coordinator, Western Hermann's Tortoise North American Regional Studbook
Owner/Operator, Garden State Tortoise, LLC & Hermann Haven
Educational Resource Developer, theTurtleRoom

INTRODUCTION

Also known as the Italian tortoise, the Western Hermann's tortoise is found only in disjoint populations on the mainland of Italy, the Italian islands of Sicily and Sardinia, southern France including the island of Corsica and also in Spain together with the Balearic Islands Majorca and Menorca. It is one of two currently recognized subspecies of Hermann's tortoise and remains the rarest. This tortoise once occupied a more expansive range in its native countries but has since been reduced to very small population numbers and a rather restricted distribution today. Severe over-collection for the pet trade in earlier years, habitat destruction, pollution and predation has had detrimental effects on wild *Testudo hermanni hermanni* inhabitants. Many areas where they once thrived are now vacant of any specimens at all. A small and vulnerable tortoise, *T. hermanni hermanni* stands little chance of survival in several areas where they currently exist. Many of these locations are major tourist attractions thus aiding in the continuation of tortoises being in the inevitable presence of man. The introduction and success of predatory animals such as the wild boar only increase the mortality rate of wild individuals and only a tiny percentage of hatchlings actually make it to adulthood. Even as adults these tortoises may not survive beyond the age of 20 to 30 years in nature as they succumb to wild fires and females are crushed on roadways while searching for nesting sites. With an average clutch size of usually no more than 2 to 3 eggs and a low fertility rate, it is difficult for *Testudo hermanni hermanni* to make any kind of "dent" in rebuilding already brutally damaged populations without human intervention. While some organizations in their native lands have had success with head-starting and release programs, it is still difficult to say what kind of real future these tortoises have in our ever-changing world.

Today, *T. h. hermanni* is maintained in captivity within some countries in decent numbers. Various reports of propagation success and captive bred juveniles sometimes being available to the general public within the reptile community have been noted. However, this tortoise remains poorly understood and we find it stuck amidst the mass identity confusion already engulfing the species and subspecies belonging to the genus *Testudo*. It is this reason among others that they remain extremely rare in United States captive collections. Countless animals no longer exist entirely due to improper care and the mixing of them with other types of tortoises. Blood lines once pure have been utterly destroyed which can only be attributed to the cross breeding between themselves and their common Eastern cousins (*Testudo hermanni boettgeri*) in captivity. This irresponsible display of human error has resulted in the production of impure specimens which are then additionally bred into other colonies diluting the blood lines even further. The influx of these cross-bred tortoises has supplemented the identity crisis already associated with Hermann's and other Mediterranean tortoise species in a great way. This unfortunately has led to the disappearance of pure blooded *T. h. hermanni* in U.S. collections.

The purpose behind the creation of the Western Hermann's Tortoise North American Regional Studbook is education, awareness and protection. We must educate ourselves on the proper identification of the world's turtle and tortoise species and subspecies. Their specific

needs and requirements can only truly be met once we gain the knowledge and understanding regarding them. We need to beware of the potential threats these creatures face globally both in captivity and in the wild in order to successfully protect their future and their fate. The safeguarding of *Testudo hermanni hermanni* by means of a studbook allows us to closely monitor the existing specimens in our country, under our care to ensure their purity and proper placement (of offspring) within the community. In past decades the unsuitable keeping of these tortoises through mismanagement and misunderstanding has left us with very few notably pure specimens with real historic evidence. The “founder stock” listed in this studbook are accountable for the legitimate forthcoming of their kind in American collections today. Their wellbeing is of boundless importance.



Figure 1. Adult female *Testudo hermanni hermanni* from Sicily, Italy. Photo by Chris Leone.

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 1: Tuscany, Italy

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
1001	##### 4728	M	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C	C1001L	8	7	2013	Capture Import
1002	##### 0703	M	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C	C1002L	8	7	2013	Capture Import
1003	##### 3929	M	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C	C1003L	8	7	2013	Capture Import
1004	##### 0339	M	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C Zovickian, W Gaugler, L	C1004L 0007	6 9 4	7 30 27	2013 2013 2014	Capture Import Transfer Transfer
1005	##### 5073	F	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C Gaugler, L	C1005L 0013	8 12	7 7	2013 2014	Capture Import Transfer
1007	##### 0303	F	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C	C1007L	8	7	2013	Capture Import
1009	##### 1117	F	Deceased	N/A	WILD	WILD	Tuscany, Italy Leone, C Leone, C	C1009L C1009L	8 9	7 30	2013 2013	Capture Import Death
1010	##### 1384	F	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C	C1010L	8	7	2013	Capture Import
1011	##### 1351	F	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C	C1011L	8	7	2013	Capture Import
1012	##### 6829	F	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C	C1012L	8	7	2013	Capture Import
1014	##### 2687	F	Living	N/A	WILD	WILD	Tuscany, Italy Leone, C Zovickian, W Gaugler, L	C1014L 0008	8 9 4	7 30 27	2013 2013 2014	Capture Import Transfer Transfer
1015		UNK	Living	2/11/2014	1004	1008	Leone, C Heidecker, J	C1015L	2 3	11 17	2014 2015	Hatch - Captive Transfer
1016		UNK	Living	2/12/2014	1004	1008	Leone, C	C1016L	2	12	2014	Hatch - Captive
1017		UNK	Living	2/17/2014	1004	1008	Leone, C	C1017L	2	17	2014	Hatch - Captive
1018		M	Living	8/22/2013	UNK	UNK	Zovickian, W Gaugler, L	0009 0009	12 4	20 27	2013 2014	Acquisition Transfer
1019		F	Living	8/22/2013	UNK	UNK	Zovickian, W Gaugler, L Leone, C Heidecker, J	0010 0010 C1019L	12 4 12	20 27 7	2013 2014 2014	Acquisition Transfer Transfer Transfer
1020		F	Living	8/23/2013	UNK	UNK	Zovickian, W Gaugler, L	0011 0011	12 4	20 27	2013 2014	Acquisition Transfer
1021		M	Living	8/24/2013	UNK	UNK	Zovickian, W Gaugler, L	0012 0012	12 4	20 27	2013 2014	Acquisition Transfer
1022		F	Living	8/25/2013	UNK	UNK	Zovickian, W Gaugler, L	0014 0014	12 4	20 27	2013 2014	Acquisition Transfer
1023		F	Living	8/26/2013	UNK	UNK	Zovickian, W Gaugler, L	0015 0015	12 4	20 27	2013 2014	Acquisition Transfer
1024		F	Living	8/29/2013	UNK	UNK	Zovickian, W Gaugler, L	0016 0016	12 4	20 27	2013 2014	Acquisition Transfer
1025		F	Living	8/30/2013	UNK	UNK	Zovickian, W Gaugler, L Leone, C Siatkowski, G	0017 0017 C1025L	12 4 12	20 27 7	2013 2014 2014	Acquisition Transfer Transfer Transfer

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
1026		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C1026L				Hatch - Captive Transfer
1027		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C1027L				Hatch - Captive Transfer
1028		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C1028L				Hatch - Captive Transfer
1029		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C1029L				Hatch - Captive Transfer
1032		UNK	Living	12/14/2014	1001	1005	Leone, C Robbins, J	C1032L	12 2	14 26	14 15	Hatch - Captive Transfer
1033		UNK	Living	5/10/2015	1004	1014	Gaugler, L Anastasiou, N		5 6	10 23	2015 2015	Hatch - Captive Transfer
1034		UNK	Living	5/29/2015	1004	1005	Gaugler, L Anastasiou, N		5 6	29 23	2015 2015	Hatch - Captive Transfer
1035		UNK	Living	5/30/2015	1004	1005	Gaugler, L Anastasiou, N		5 6	30 23	2015 2015	Hatch - Captive Transfer

Living Totals: 6.12.11 (29)



Figure 2. Adult female *Testudo hermanni hermanni* from Tuscany, Italy. Photo by Chris Leone.

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 2: Calabria, Italy

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
2001	##### 0982	M	Living	N/A	WILD	WILD	Calabria, Italy Leone, C	C2001L	8	7	2013	Capture Import
2002	##### 0979	M	Living	N/A	WILD	WILD	Calabria, Italy Leone, C Gaugler, L	C2002L 0060	8	7	2013	Capture Import
									3	12	2015	Transfer
2004	##### 0949	F	Living	N/A	WILD	WILD	Calabria, Italy Leone, C	C2004L	8	7	2013	Capture Import
2006	##### 3794	F	Living	N/A	WILD	WILD	Calabria, Italy Leone, C Gaugler, L	C2006L 0061	8	7	2013	Capture Import
									3	12	2015	Transfer
2007	##### 1356	F	Living	N/A	WILD	WILD	Calabria, Italy Leone, C	C2007L	8	7	2013	Capture Import
2008	##### 3615	F	Living	N/A	WILD	WILD	Calabria, Italy Leone, C	C2008L	8	7	2013	Capture Import
2009	##### 1444	F	Living	N/A	WILD	WILD	Calabria, Italy Leone, C	C2009L	8	7	2013	Capture Import
2010	##### 9797	F	Living	N/A	WILD	WILD	Calabria, Italy Leone, C Gaugler, L	C2010L 0062	8	7	2013	Capture Import
									3	12	2015	Transfer
2012		UNK	Living	7/12/2014	UNK	UNK	Leone, C Bryson, T	C2012L	7	12	2014	Hatch - Captive Transfer
2013		UNK	Living	7/20/2014	UNK	UNK	Leone, C Bryson, T	C2013L	7	20	2014	Hatch - Captive Transfer
2014		UNK	Living	7/20/2014	UNK	UNK	Leone, C Bryson, T	C2014L	7	20	2014	Hatch - Captive Transfer
2015		UNK	Living	7/21/2014	UNK	UNK	Leone, C Bryson, T	C2015L	7	21	2014	Hatch - Captive Transfer
2017		UNK	Living	9/7/2014	2002	2005	Leone, C Abramson, A	C2017L	9	7	2014	Hatch - Captive Transfer
									12	6	2014	Transfer
2025		UNK	Living	UNK	2002	2006	Leone, C Bryson, T	C2025L				Hatch - Captive Transfer

Living Totals: 2.6.6 (14)



Figure 3. Adult female *Testudo hermanni hermanni* from Calabria, Italy. Photo by Chris Leone.⁷

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 3: Sicily, Italy

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
3001	##### 9279	M	Living	N/A	WILD	WILD	Sicily, Italy Leone, C	C3001L	8	7	2013	Capture Import
3002	##### 1963	M	Living	N/A	WILD	WILD	Sicily, Italy Leone, C	C3002L	8	7	2013	Capture Import
3003	##### 2446	M	Living	N/A	WILD	WILD	Sicily, Italy Leone, C	C3003L	8	7	2013	Capture Import
3004	##### 5393	F	Living	N/A	WILD	WILD	Sicily Italy Leone, C	C3004L	8	7	2013	Capture Import
3005	##### 4206	F	Living	N/A	WILD	WILD	Sicily, Italy Leone, C	C3005L	8	7	2013	Capture Import
3006	##### 8007	F	Living	N/A	WILD	WILD	Sicily, Italy Leone, C	C3006L	8	7	2013	Capture Import
3007	##### 0856	F	Living	N/A	WILD	WILD	Sicily, Italy Leone, C	C3007L	8	7	2013	Capture Import
3008	##### 2810	F	Living	N/A	WILD	WILD	Sicily, Italy Leone, C	C3008L	8	7	2013	Capture Import
3010		M	Living	3/5/2014	UNK	3006	Leone, C	C3010L	3	5	2014	Hatch - Captive
3011		F	Living	3/13/2014	UNK	3006	Leone, C	C3011L	3	13	2014	Hatch - Captive
3012		UNK	Living	3/31/2014	UNK	3005	Leone, C	C3012L	3	31	2014	Hatch - Captive
3013		UNK	Living	4/8/2014	UNK	3004	Leone, C	C3013L	4	8	2014	Hatch - Captive
3014		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C3014L				Hatch - Captive Transfer
3015		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C3015L				Hatch - Captive Transfer
3016		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C3016L				Hatch - Captive Transfer
3017		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C3017L				Hatch - Captive Transfer
3018		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C3018L				Hatch - Captive Transfer
3019		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C3019L				Hatch - Captive Transfer
3020		UNK	Living	6/17/2015	3001	3006	Leone, C	C3020L	6	17	2015	Hatch - Captive
3021		UNK	Living	6/17/2015	3001	3006	Leone, C	C3021L	6	17	2015	Hatch - Captive
3022		UNK	Living	6/17/2015	3001	3006	Leone, C	C3022L	6	17	2015	Hatch - Captive

Living Totals: 4.6.11 (21)

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 4: Majorca, Balearic Islands, Spain

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
4002	##### 6551	F	Deceased	N/A	WILD	WILD	Majorca Leone, C Leone, C	C4002L C4002L	6 11	7 27	2013 2013	Capture Import Death
4004	##### 4053	M	Living	N/A	WILD	WILD	Majorca Leone, C	C4004L	1	28	2014	Capture Import
4005	##### 8715	M	Living	N/A	WILD	WILD	Majorca Leone, C	C4005L	1	28	2014	Capture Import
4006	##### 3802	F	Living	N/A	WILD	WILD	Majorca Leone, C	C4006L	1	28	2014	Capture Import
4008	##### 4529	F	Living	N/A	WILD	WILD	Majorca Leone, C	C4008L	1	28	2014	Capture Import
4009	##### 3900	F	Living	N/A	WILD	WILD	Majorca Leone, C	C4009L	1	28	2014	Capture Import
4010		F	Living	7/12/2013	UNK	UNK	Zovickian, W Gaugler, L Zovickian, W	0081 0081	12 7	20 1	2013 2014	Acquisition Transfer Transfer
4011		F	Living	7/13/2013	UNK	UNK	Zovickian, W Gaugler, L	0082 0082	12 7	20 1	2013 2014	Acquisition Transfer
4012		F	Living	7/13/2013	UNK	UNK	Zovickian, W Gaugler, L	0083 0083	12 7	20 1	2013 2014	Acquisition Transfer
4013		M	Living	7/14/2013	UNK	UNK	Zovickian, W Gaugler, L	0084 0084	12 7	20 1	2013 2014	Acquisition Transfer
4014		F	Living	7/15/2013	UNK	UNK	Zovickian, W Gaugler, L	0085 0085	12 7	20 1	2013 2014	Acquisition Transfer
4015		F	Living	7/16/2013	UNK	UNK	Zovickian, W Gaugler, L	0086 0086	12 7	20 1	2013 2014	Acquisition Transfer
4016		F	Living	7/17/2013	UNK	UNK	Zovickian, W Gaugler, L	0087 0087	12 7	20 1	2013 2014	Acquisition Transfer
4017		M	Living	7/20/2013	UNK	UNK	Zovickian, W Gaugler, L	0088 0088	12 7	20 1	2013 2014	Acquisition Transfer
4018		UNK	Deceased	7/22/2013	UNK	UNK	Zovickian, W	0089	12 9	20 10	2013 2014	Acquisition Death
4019		M	Living	7/24/2013	UNK	UNK	Zovickian, W Gaugler, L	0091 0091	12 7	20 1	2013 2014	Acquisition Transfer
4020	##### 2729	F	Living	N/A	WILD	WILD	Majorca Leone, C	C1013L	8	7	2013	Capture Import
4021	##### 7283	F	Living	N/A	WILD	WILD	Majorca Leone, C	C3009L	8	7	2013	Capture Import
4022	##### 7229	F	Living	N/A	WILD	WILD	Germany Leone, C	C9207L	7	10	2014	Import
4023	##### 6751	F	Living	N/A	WILD	WILD	Germany Leone, C	C9209L	7	10	2014	Import

Living Totals: 5.13.0 (18)

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 5: Ebro Delta, Spain

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
5001	##### 2141	M	Living	N/A	WILD	WILD	Madrid Leone, C	C5001L	1	28	2014	Import
5002	##### 4892	F	Living	N/A	WILD	WILD	Madrid Leone, C	C5002L	1	28	2014	Import
5003		UNK	Living	4/22/2014	5001	5002	Leone, C Bryson, T	C5003L	4	22	2014	Hatch - Captive
5004		UNK	Deceased	4/26/2014	5001	5002	Leone, C	C5004L	4	26	2014	Death
5005		UNK	Deceased	4/27/2014	5001	5002	Leone, C	C5005L	4	27	2014	Death
5007		UNK	Living	UNK	5001	5002	Leone, C Bryson, T	C5007L	1		2015	Transfer
5008		UNK	Living	UNK	5001	5002	Leone, C Bryson, T	C5008L	1		2015	Transfer
5009		UNK	Living	UNK	5001	5002	Leone, C Bryson, T	C5009L	1		2015	Transfer

Living Totals: 1.1.4 (6)



Figure 4. Adult female *Testudo hermanni hermanni* from Ebro Delta, Spain. Photo by Chris Leone.

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 6: Menorca, Balearic Islands, Spain

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
6001		M	Living	8/23/2013	UNK	UNK	Zovickian, W Leone, C	0001 C6001L	12 6	20 23	2013 2015	Acquisition Transfer
6002		M	Living	8/25/2013	UNK	UNK	Zovickian, W	0002	12	20	2013	Acquisition
6003		M	Living	8/26/2013	UNK	UNK	Zovickian, W	0003	12	20	2013	Acquisition
6004		M	Living	8/26/2013	UNK	UNK	Zovickian, W	0004	12	20	2013	Acquisition
6005		M	Living	8/27/2013	UNK	UNK	Zovickian, W Leone, C	0005 C6005L	12 6	20 23	2013 2015	Acquisition Transfer
6006		M	Living	8/28/2013	UNK	UNK	Zovickian, W Leone, C	0006 C6006L	12 6	20 23	2013 2015	Acquisition Transfer
6007		M	Living	8/30/2013	UNK	UNK	Zovickian, W	0007	12	20	2013	Acquisition
6008		M	Living	8/31/2013	UNK	UNK	Zovickian, W	0008	12	20	2013	Acquisition
6009		M	Living	ca. 1980	UNK	UNK	Blome, R Zovickian, W Blome, R	0051	6 10	1 2	1989 2013	Acquisition Transfer (Loan) Transfer
6010		F	Living	ca. 1980	UNK	UNK	Blome, R Zovickian, W Blome, R	0052	6 10	1 2	1989 2013	Acquisition Transfer (Loan) Transfer
6011		F	Deceased	ca. 1980	UNK	UNK	Blome, R Zovickian, W	0053	6 10	1 2	1989 2013	Acquisition Transfer (Loan) Death
6012	##### 4128	M	Living	N/A	WILD	WILD	Menorca Leone, C	C4001L	6	7	2013	Capture Import
6013	##### 8489	F	Living	N/A	WILD	WILD	Menorca Leone, C	C4003L	6	7	2013	Capture Import
6014	##### 9740	F	Living	N/A	WILD	WILD	Menorca Leone, C Zovickian, W	C4007L	1 6	28 23	2014 2015	Capture Import Transfer
6015		UNK	Living	8/28/2014	4001	4003	Leone, C Ashley, J	C4024L	8 3	28 11	2014 2015	Birth - Captive Transfer
6016		UNK	Living	8/28/2014	4001	4003	Leone, C Bryson, T	C4020L	8	28	2014	Birth - Captive Transfer
6017		UNK	Living	Fall 2014	UNK	UNK	Leone, C Bryson, T	C4021L	Fall		2014	Hatch - Captive Transfer
6018		UNK	Living	Fall 2014	UNK	UNK	Leone, C Bryson, T	C4022L	Fall		2014	Hatch - Captive Transfer
6019		UNK	Living	Fall 2014	UNK	UNK	Leone, C Bryson, T	C4023L	Fall		2014	Hatch - Captive Transfer
6020		UNK	Living	Fall 2014	UNK	UNK	Leone, C Ashley, J	C4025L	Fall 3		2014 11	Hatch - Captive Transfer
6021	##### 6922	F	Living	N/A	WILD	WILD	Menorca Leone, C	C1006L	8	7	2013	Capture Import
6022	##### 6778	F	Living	N/A	WILD	WILD	Germany Leone, C	C9208L	7	10	2014	Import
6023		UNK	Living	6/2/2015	6012	6014	Leone, C	C6023L	6	2	2015	Hatch - Captive

Living Totals: 10.5.7 (22)

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 7: Corsica, France

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
7001		M	Living	8/13/2013	UNK	UNK	Zovickian, W Gaugler, L	0019	12	20	2013	Acquisition
								0019	5	22	2014	Transfer
7002		F	Living	8/14/2013	UNK	UNK	Zovickian, W Gaugler, L	0021	12	20	2013	Acquisition
								0021	5	22	2014	Transfer
7003		F	Living	8/15/2013	UNK	UNK	Zovickian, W Gaugler, L	0022	12	20	2013	Acquisition
								0022	5	22	2014	Transfer
7004		F	Living	8/15/2013	UNK	UNK	Zovickian, W Gaugler, L	0023	12	20	2013	Acquisition
								0023	5	22	2014	Transfer
7005		F	Living	8/16/2013	UNK	UNK	Zovickian, W Gaugler, L	0024	12	20	2013	Acquisition
								0024	5	22	2014	Transfer
7006		M	Living	8/17/2013	UNK	UNK	Zovickian, W Gaugler, L	0025	12	20	2013	Acquisition
								0025	5	22	2014	Transfer
7007		M	Living	8/18/2013	UNK	UNK	Zovickian, W Gaugler, L	0026	12	20	2013	Acquisition
								0026	5	22	2014	Transfer
7008		UNK	Deceased	8/19/2013	UNK	UNK	Zovickian, W	0027	12	20	2013	Acquisition
									7	9	2014	Death
7009		F	Living	8/28/2013	UNK	UNK	Zovickian, W Gaugler, L	0039	12	20	2013	Acquisition
								0039	5	22	2014	Transfer
7010		UNK	Deceased	8/31/2013	UNK	UNK	Zovickian, W	0040	12	20	2013	Acquisition
									9	10	2014	Death

Living Totals: 3.5.0 (8)

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 8: Varoise, France

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	

This locale is currently being reworked due to new findings on the background of the animals and anticipated future additions.

Living Totals: 0.0.0 (0)

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 9a: Apulia, Italy - Gargano

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
9201	##### 6758	M	Living	N/A	WILD	WILD	Gargano Leone, C	C9201L	7	10	2014	Capture Import
9202	##### 6752	M	Living	N/A	WILD	WILD	Gargano Leone, C	C9202L	7	10	2014	Capture Import
9203	##### 4728	M	Living	N/A	WILD	WILD	Gargano Leone, C	C9203L	7	10	2014	Capture Import
9204	##### 7227	F	Living	N/A	WILD	WILD	Gargano Leone, C	C9204L	7	10	2014	Capture Import
9205	##### 6453	F	Living	N/A	WILD	WILD	Gargano Leone, C	C9205L	7	10	2014	Capture Import
9206	##### 7348	F	Living	N/A	WILD	WILD	Gargano Leone, C	C9206L	7	10	2014	Capture Import
9210	##### 7223	F	Living	N/A	WILD	WILD	Gargano Leone, C	C9210L	7	10	2014	Capture Import
9211	##### 7342	F	Living	N/A	WILD	WILD	Gargano Leone, C Gaugler, L	C9211L 0051	7 12	10 7	2014 2014	Capture Import Transfer
9212		UNK	Living	1/25/2015	UNK	UNK	Leone, C Gaugler, L	C9212L 0052	1 3	25 12	2015 2015	Hatch - Captive Transfer
9213		UNK	Living	1/25/2015	UNK	UNK	Leone, C Gaugler, L	C9213L 0053	1 3	25 12	2015 2015	Hatch - Captive Transfer
9214		UNK	Living	1/31/2015	UNK	UNK	Leone, C Gaugler, L	C9214L 0054	1 3	31 12	2015 2015	Hatch - Captive Transfer

Living Totals: 3.5.3 (11)



Figure 5. Adult female *Testudo hermanni hermanni* from Gargano, Apulia, Italy. Photo by Chris Leone.

Western Hermann's Tortoise Studbook
(*Testudo hermanni hermanni*) - Locality 9b: Apulia, Italy - Undetermined

Studbook #	Microchip #	Sex	Status	Hatch Date	Sire	Dam	Location	Local ID	Date			Event Type
									M	D	Y	
9001	##### 7889	M	Deceased	N/A	N/A	N/A	Ullmann, G Bailey, J Leone, C Leone, C	C9001L C9001L	5	8	2009	Hatch - Captive Transfer Transfer Death
9002	##### 9393	F	Deceased	N/A	WILD	WILD	Ullmann, G Leone, C Leone, C	C9002L C9002L	?	??	2006	Capture Transfer Death
9003	##### 7654	F	Living	N/A	N/A	N/A	Ullmann, G Bailey, J Leone, C Sopher, K	C9003L	5	8	2009	Hatch - Captive Transfer Transfer Transfer
9004	##### 6721	F	Living	N/A	N/A	N/A	Ullmann, G Heidecker, J Leone, C Sopher, K	C9004L	2	4	2009	Hatch - Captive Transfer Transfer Transfer
9005	##### 3635	F	Living	5/29/2011	C5001L	C5004L	Leone, C Hermes, A	C9005L	5	29	2011	Hatch - Captive Transfer
9006		UNK	Living	UNK	UNK	UNK	Leone, C Hembree, C Bright, G	C9006L				Hatch - Captive Transfer Transfer
9007		UNK	Living	2013	UNK	UNK	Leone, C Egnatchik, S Anastasiou, N Gaugler, L	C9007L	12		2013	Hatch - Captive Transfer Transfer Transfer
9008		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C9008L			2015	Hatch - Captive Transfer
9009		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C9009L			2015	Hatch - Captive Transfer
9010		UNK	Living	UNK	UNK	UNK	Leone, C Hembree, C Bright, G	C9010L				Hatch - Captive Transfer Transfer
9011		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C9011L			2015	Hatch - Captive Transfer
9012		UNK	Living	UNK	UNK	UNK	Leone, C Bryson, T	C9012L			2015	Hatch - Captive Transfer
9013		UNK	Living	UNK	UNK	UNK	Leone, C Siatkowski, G	C9013L				Hatch - Captive Transfer
9014		UNK	Living	UNK	UNK	UNK	Leone, C Siatkowski, G	C9014L				Hatch - Captive Transfer
9015		F	Living	2010	UNK	UNK	Leone, C Anastasiou, N Gaugler, L		6		2010	Hatch - Captive Transfer Transfer
9016		F	Living	2010	UNK	UNK	Leone, C Anastasiou, N Gaugler, L		10		2010	Hatch - Captive Transfer Transfer
9017		F	Living	2012	UNK	UNK	Bettinger, S Anastasiou, N Gaugler, L		6		2012	Hatch - Captive Transfer Transfer
9018		F	Living	2012	UNK	UNK	Bettinger, S Anastasiou, N Gaugler, L		6		2012	Hatch - Captive Transfer Transfer

Living Totals: 0.7.9 (16)

NOTES

Following the genetic work that was completed on most of the specimens in the studbook, some changes have been made to ensure the integrity of the localities in the studbook. Three specimens were not able to be matched to a specific locality. As a result, they have been completely removed from the studbook. A few specimens have been found to belong to different locales, so they have been appropriately moved in the book and have been assigned new numbers. As a result, some offspring were from mixed-locale parents and have also been removed from the studbook. One group of animals believed to be from the Apulia, Italy region did not have DNA samples involved in the study, so they have been segregated from the animals confirmed to be from Gargano, Apulia, Italy. Lastly, locale 8 – Varoise, France – is currently being reworked due to new findings on the background of the animals and anticipated future additions. For now no animals will appear in this section.

It should also be noted that, due to a computer crash, some data and information has been lost. As a result, some hatch dates and event dates are now unknown.



Figure 6. Adult female (left) and Adult male (right) *Testudo hermanni hermanni* from Menorca, Spain. Photo by Chris Leone.

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Figure 7. Hatching *Testudo hermanni hermanni* from Apulia, Italy. Photo by Chris Leone.