Pedigrees and Other Useful Record Keeping Tools

by Peter Herman
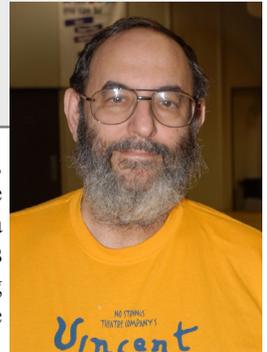
Let's begin with some background and definitions. First off, what is a pedigree? A pedigree is a piece of paper or computer file that contains the background information of a cavy, or any other animal as far as that goes. We generally consider that a cavy has a "full" or three-generation pedigree when the background shown on it has information on the cavy's parents, grand parents, and great grandparents.

So, how do you go about producing pedigrees on your animals? Of course, it is easiest if the stock you start with already have three-generation pedigrees. Then all you need to do is keep up the records every time you have a litter. If your stock came with incomplete pedigrees or no pedigrees at all, you start with what you have! If you have an unpedigreed pair that produce a litter, you can start a pedigree right there by recording the information on the pups and both of the parents. Now you have animals with a one generation pedigree. Breed two of these together and the pups have a two generation pedigree if you record the parents and grandparents. Breed two animals with two-generation pedigrees together, and their pups now have a full pedigree. As my late mother-in-law was fond of saying, "It talks fast!"

It will take time to get full pedigrees on your animals. Sometimes you will have cases where you need to breed an animal with a two-generation pedigree to one with a one-generation pedigree or no pedigree at all. Then you wind up with an animal with a complete pedigree on one side and a partial on the other. However, with time, patience, and diligence, you will ultimately reach the goal of having "full" three-generation pedigrees on all your stock. Of course, as time goes by, you get more and more generations of background. After 35+ years of keeping pedigrees we have 60+ generations of information on some of our animals and at least 8 or 10 on all of them.

When doing pedigrees, more is better! The more information you record, the more information you will have when you want to use the pedigrees. You can record the information by hand on pedigree forms like we did back in the early days. However, nowadays, most of us use some form of computer program. Probably the most common one out there, and the one we use, is produced by Evans Software. There are several others as well.

All of them have slightly different features, but pretty much all of them do the same basic things. The real advantage of using a program is that once you have your breeders entered, you can make pedigrees by naming the parents and then let the computer do the rest.

When you first start using a program or building pedigrees by hand, you will need to enter the pedigree information on each animal. So what do you want to record? Every animal in the background should have, at minimum, the following information:

1) name [if named)]
2) ear tag/Tattoo number
3) breed
4) variety description [full variety Broken – Cream/Chocolate/White not just Broken Color]
5) adult weight
6) registration and grand champion numbers if appropriate

For the pup being pedigreed, you want everything above plus the birth date. Obviously on a youngster, you won't have an adult weight or registration/GC numbers. Pedigree forms and computer programs have places for all this information. Most also have

PERUVIAN CAVY PEDIGREE

CAVIARIA RUSTICANA
1440 Carol Ann Ct.
Las Cruces NM 88007
Phone: 505-524-0712

Sold to:
K.V. BUYER
123 PINE TRAIL
LAS CRUCES, NM 88001
Date Sold: 1/8/08

BROKEN BEIGE/REO/WHITE
Ear #:   Reg #:
Breed: PERUVIAN
G.C. #:   Legs:
DOB: October 28, 2007
SEX: BOAR   Weight: 27oz

Sire:
HERMAN'S DAGMAR
BROKEN - GA/RED/WHITE
Ear #: BC10   Reg #: H900
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 41 ounces

Dam:
HERMAN'S HELENA
BROKEN BEI-OR AG/REO/WH
Ear #: BC33   Reg #: D59
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 34 ounces

G. Sire:
HERMAN'S VILHELM
BROKEN RED/WHITE
Ear #: BC44   Reg #: D56
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 41 ounces

G. Dam:
HERMAN'S FLORENCE
BROKEN GA/RED/WHITE
Ear #: BC55   Reg #: D58
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 34 ounces

G. Sire:
HERMAN'S ULF
BROKEN RED/WHITE
Ear #: BC6   Reg #: H871
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 49 ounces

G. Dam:
HERMAN'S NELLY
BROKEN BEIGE/REO/WHITE
Ear #: BC11   Reg #: H885
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 35 ounces

G.G. Sire:
HERMAN'S ULF
BROKEN RED/WHITE
Ear #: BC6   Reg #: H871
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 49 ounces

G.G. Dam:
HERMAN'S NELLY
BROKEN BEIGE/REO/WHITE
Ear #: BC11   Reg #: H885
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 35 ounces

G.G. Sire:
HERMAN'S KNUT
BROKEN RED/WHITE
Ear #: BC88   Reg #: H877
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 50 ounces

G.G. Dam:
HERMAN'S ZERLINA
BROKEN GA/RED/WHITE
Ear #: BC7   Reg #: H894
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 41 ounces

G.G. Sire:
HERMAN'S KNUT
BROKEN RED/WHITE
Ear #: BC88   Reg #: H877
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 50 ounces

G.G. Dam:
HERMAN'S VIOLET
BROKEN LILAC/ORANGE/WHITE
Ear #: BC73   Reg #: H893
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 40 ounces

G.G. Sire:
HERMAN'S TOMAS
BROKEN GA/RED/WHITE
Ear #: 44BC   Reg #: H873
Breed: PERUVIAN
G.C. #:   Legs: BB
Weight: 39 ounces

G.G. Dam:
HERMAN'S DISA
BROKEN R.E.O./WHITE
Ear #: 17BC   Reg #: H883
Breed: PERUVIAN
G.C. #:   Legs:
Weight: 44 ounces

I hereby certify that this pedigree is correct to the best of my knowledge and belief.
Signed:

Peter & Ceil Herman

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a line for notes. This is a place you can record anything you want about the animal. Useful information such as whether the animal is a satin carrier, other genetic information, the quality of its markings, show winnings if there is not a separate line for them, or anything else which you think you might want to know about the animal but not remember five years after you write the pedigree can go into this spot.

Why go to the trouble of keeping pedigrees or some of the other records we'll go into later? Well, some of us just like keeping records and knowing as much as we can about our animals! It can be one of the things that helps make the hobby fun. However, from my perspective, the most important reason to keep pedigrees and other records is that they help you make good breeding decisions, and just as important, avoid bad ones. With pedigrees and a basic knowledge of genetics, you are in a position to predict which matings are most likely to give you the varieties you want and/or avoid the varieties you don't. The same applies to breeds if your animals come from mixed backgrounds. Another reason why people keep pedigrees is to be able to register animals. For registrations, you need a three-generation pedigree showing a single breed. Finally, many buyers of your animals will want as much information as possible about the stock that they purchase from you. There are breeders like us who will only bring in an animal that we know is pure breeding while others will want to know the carrier status of animals.

What other kinds of records can be useful? There are three major ones, a running weight sheet, litter records, and genotype inventories. We keep a clip board in the caviary with each animal listed on a sheet. Every week when we change cages, we record each animal's weight. We also record when an animal is put into breeding, when we can first palpate pups, when the sow is taken out to a separate cage, when the litter is born, and when the pups are weaned. Some breeders keep some or all of these records on coop tags. Tracking this information tells you how fast different animals grow, how long sows take to get bred, how well sows are gaining during pregnancy, and how good a job they are doing raising their pups.

Most of the pedigree programs have a litter record function. Before the computer, we kept litter records on index cards in a file. Each litter record should include:

1) litter's sire
2) date the litter was born
3) number of live pups
4) number of still born pups
5) number weaned
6) number show quality
7) colors and sexes (and breeds) of ALL pups

Keep a record on totally still-born or aborted litters. That way you will know if a sow has litters with one boar but aborts with another, which sows consistently have show quality pups, how many pups each sow has on average, and what colors you are getting from each mating. If you use the computer, you can generate a litter record that contains the first six items and expand it to list the breeds, colors, and sexes of the pups and automatically generate pedigrees on them.

Some breeders keep a genetic inventory in the notes section of a pedigree while others use our method and keep a separate sheet with the breeders listed with what we can deduce of their genotype. We record what we know about, Color (C), Extension (E), Agouti (A), White Spotting (S), Pink Eyed Dilute (P), Chocolate (B), and Roan (Rn). Some information we can fill in right away from the pedigree or just by looking at the animal. You know that a red is ee or a chocolate is bb. If you have a TSW out of a Red and White Broken bred to a TSW, you know that is e^pe. Other times you put down what you know, leaving blanks and fill them in if you get more information from litters. We recently had a Golden Agouti/Red/White Broken who we could tell by looking was B_ (at least one gene for black rather than chocolate) and P_ (one gene for non-pink-eye dilute). We bred him to a Beige/REO/White Broken sow and they had a Beige/REO/White Broken pup. This let us update his record to show that he was Bb and Pp.

Because we raise only pure breeding Peruvians, we don't need to record information on Rough (R), Teddy (T), Rex (Rx), Star (St), and (Sn). But if you have animals with mixed backgrounds, you will want to know about these as well.

Pedigrees and records are not a substitute for good breeding sense and careful culling. And yes, it is possible to produce show winners without keeping any records at all! However, for many of us, the effort we put into record keeping makes the challenge of producing stock of the quality and colors we desire a little easier and less uncertain.

Name	Notes	12/25	1/1	1/7		
Amalia (GA Rn RN151)	R	21	21	22		
Aurelia (Golden Agouti GA1)	x Tor 12/3	37	38	39		
Berit (Be,Or,Wh sow BC25)	x Tors 11/2, pg 12/25	40?	41	43		
Britta (R/W sow,BC3)	x Ture 11/25	37.5	38	38		
Dorcas (TSW sow, TW1)	x Tork9/10x Lys 12/3 pg 1/1	48?	47	50		
Evalina (Tri Sow, BC13)	xTure, lit 12/25, 2 trib,1 tri s	36	36	36		
Florence (Tri sow, BC55)	x Ture lit11/22,2 tri B, triS R	32	32	32		
Gisella (GA/Red Rn S, Rn7)	x Ste 10/22, pg 12/10	47	48	50		
Hedda (Bl/R/Rn Sow, Rn9)	x Vil 12/3	39	42	43		
Helena (Dil Ag Tri BC33)	x Dag lit10/28,2 tridilb, tribR	32	32	32		
Maja (Black sow, B3)	x Stel 12/10	36	37	37		
Mary (TS sow, TS1)	xLyslit 11/23 Bls,GAs,RnsR	35	38	38		
Miss Peepers (BC peep RN5)	x Vil lit 1/4, rwbpeep,rws,rwb	45	47	36		
Nelly (DilAg Tri BC11)()	x Dag lit 1/3 trib,tris, 1d	48	53	36		
Red Stripe (Tri sow, BC7)	x Oliv 9/18, pg 1/1	44?	46	48		
Selma (R/W sow BC15)	x Sixten 12/10	24	26	28?		
Violet (Lil/or/wh, BC73)	x Nils 7/2, lit 10/6, TriS R	35	34	34		
Dagmar (Tri Boar (BC10)	x Hel 8/12,x Nel 10/16, R1/1	42	42	42		
Lysander (Roan boar, Rn2)	x Mar8/20 x Dor 12/3, R 1/1	49	49	49		
Oliver (Dil Ag Tri boar, BC8)	x Disa 8/12x RS 9/18, R 1/1	47	47	48		
Patches (TSW boar, TW2)	x Myr 8/26, R 10/30	48	48	48		
Sixten (GA boar GA152)	x Selma 12/10	35	36	37		
Stellan (Black boar B2)	x Gis 10/22 x Maja 12/10	41	42	43		
Torsten (GA Rn B, Rn4)	x Berit 11/2, R 1/1	43	43	44		
Torkel (GA Rn B, Rn6)	x Aur 12/3	43	45	45		
Ture (Tri Boar BC4)	x Br 11/26	40	39	40		

Name	A	C	E	P	S	B	Rn
Breeding Sows							
Aurelia (Golden Agouti GA1)	Aa	c^x	EE?	P_	ss	B_	rnrn
Berit (Beige/or/wh BC25)	aa	c^x	e^p	pp	Ss?	bb	rnrn
Britta (R&W BC3)	_a	c^x	ee	P_	S_		rnrn
Gisella (GA/Red Roan)	A_	c^x	e^pe	P_	ss	B_	Rnrn
Hedda (B/W Roan Rn9)	aa	c^x	E_	P_	Ss	B_	Rnrn
Helena (Bg-orAg trIBC33)	Aa	c^x	e^pe	pp	S_	bb	rnrn
Maja (Black B3)	aa	c^x	Ee^p	P_	ss	B_	rnrn
Mary (Tort TS1)	aa	c^x	e^pe	P_	ss	B_	rnrn
Miss Peepers (GA/Red/Wh Rn5)	Aa	c^x_	e^pe	P_	Ss?	B_	Rnrn
Nelly (Beige/Or/Wh BC11)	aa	c^x_	e^pe	pp	S_	bb	rnrn
Boars							
Dagmar (Tri BC10)	A_	c^x	e^pe	Pp	S_	Bb	rnrn
Lysander (GA Roan)	Aa	c^x_	Ee^p	P_	ss	B_	Rnrn
Oliver (LiOr Ag Tri BC8)	A_	c^x	e^p	pp	S_	Bb	rnrn
Patches (TSW TW2)	aa	c^x	e^p	P_	S_	B_	rnrn
Ture (GA/Red/Wh BC4)	Aa	c^x	e^p_	Pp	Ss	Bb	Rnrn
Ulf (R&W BC6)	Aa	c^x	ee	Pp	Ss	_b	rnrn
Vilhelm (R&W BC44)	a_	c^x	ee	Pp	S_	_b	rnrn