

**GENETIC DISEASES
OF THE
BEDLINGTON TERRIER**

**BASED ON THE
BEDLINGTON TERRIER
CLUB OF AMERICA
SURVEY
OF 2003-2004**

**THERE WERE 574 DOGS IN THE
DATA COLLECTED OF WHICH 268
OR 46.7% HAD A GENETIC
DISEASE**

**306 DOGS OR 53.3%
REPORTED NO
GENETIC DISEASE**

SO

**46.7% OF BEDLINGTON
TERRIERS IN THE SURVEY
HAD A GENETIC DISEASE OF
ONE KIND OR ANOTHER**

**IS THIS
SURVEY
PERFECT?**

**NO,
SURVEYS ARE NEVER
PERFECT**

AND
THERE IS NO
REASON TO SUSPECT
THIS SURVEY IS
DIFFERENT FROM
ALL OTHER SURVEYS

BUT

**IT IS A VERY REASONABLE
ESTIMATE OF THE
CURRENT DISEASE
SITUATION IN BEDLINGTON
TERRIERS**

AND
THERE IS NO BETTER
INFORMATION AVAILABLE
ON GENETIC DISEASES IN
BEDLINGTON TERRIERS
ANYWHERE

BEFORE WE GET INTO
THE DATA WE NEED A
LITTLE BACKGROUND

I AM GOING TO PRESENT
THE FREQUENCY OF THE
VARIOUS DISEASES
IN BEDLINGTON TERRIERS
BASED ON THE DATA
AVAILABLE

FROM THIS DATA I AM
GOING TO CALCULATE THE
FREQUENCY OF CARRIERS
(GENE FREQUENCY) IN THE
GENERAL POPULATION OF
BEDLINGTON TERRIERS

IN ORDER TO CALCULATE
THE FREQUENCY OF
CARRIERS I AM GOING TO
USE THE HARDY-WEINBERG
LAW (HARDY-WEINBERG
EQUILIBRIUM)

BASICALLY THE LAW STATES
THAT: IN A POPULATION IN
EQUILIBRIUM, WHICH IS
RANDOMLY MATED, THE
FREQUENCY OF A GENE IS THE
SQUARE ROOT OF THE
FREQUENCY OF THE
HOMOZYGOTE FOR THAT GENE

THE FORMULA IS

a^2

$2ab$

b^2

FREQUENCY

FREQUENCY

FREQUENCY

OF

OF

OF

NORMALS

CARRIERS

AFFECTEDS

a^2 $2ab$ b^2

THE LAW WAS DESIGNED
FOR AUTOSOMAL
RECESSIVE TRAITS

IT CAN BE USED ON
AUTOSOMAL DOMINANT AND
SEX-LINKED RECESSIVE
TRAITS

IT CANNOT BE USED ON
POLYGENIC TRAITS BECAUSE
WITH POLYGENIC TRAITS
MORE THAN ONE GENE IS
INVOLVED

IT CANNOT BE USED ON ANY
TRAIT FOR WHICH
THE MODE OF INHERITANCE
IS UNKNOWN

ALTHOUGH
I KNOW IT'S NOT PERFECT I
AM GOING TO USE THE LAW
ANYWAY IN ORDER TO
GUESSTIMATE CARRIER
FREQUENCY

YOU AS A BREEDER NEED TO
KNOW CARRIER FREQUENCY
IN ORDER TO MAKE
BREEDING DECISIONS FOR
YOUR DOGS

AND

AS FAR AS I CAN SEE THERE
IS NO OTHER WAY TO DO IT.

Bedlington Terriers

Cancer

No.	Disease	Mode of Inheritance	No. Affected	Frequency 0/100	The minimum guesstimate of carrier frequency%
1	Hemangiosarcoma/ Hemangioma	Poly	5	0.9	17.0
2	Mastosarcoma	Poly	1	0.2	8.4
3	Malignant Histiocytosis	Poly	4	0.7	15.2

Bedlington Terriers

Cardiovascular Diseases

4	Dilated Cardiomyopathy	Und	1	0.2	8.4
5	Valvular Disease (murmurs)	Und	18	3.1	29.5
6	Tricuspid valve dysplasia	Und	1	0.2	8.4
7	Mitral valve dysplasia	Und	5	0.9	17.0
8	Cardiomyopathy	Und	1	0.2	8.4

Bedlington Terriers

Skin Diseases

9	Hyperpigmentation Alopecia	Und	2	0.3	10.2
10	Sebaceous Adenitis	R/Und	1	0.2	8.4
11	Pemphigus	Und	4	0.7	15.2
12	Familial Footpad Hyperkeratosis	Und	3	0.5	13.1

Bedlington Terriers

Endocrine Diseases

13	Cushing's Disease (Hyperadrenocorticism)	Und	9	1.6	22.6
14	Hypothyroidism	R	26	4.5	33.2

Bedlington Terriers

Ocular Diseases

15	Cataracts	Und	45	7.8	40.3
16	Distichiasis	Und	11	20	24.1
17	Entropion	Und	6	1.1	18.6
18	Imp. Lacri. Punc.	Und	12	2.1	24.7
19	Keratoconjunctivitis Sicca	Und	6	1.1	18.6
20	Progressive Retinal Atrophy	Und	1	0.2	8.4
21	Prolapsed 3 rd Eyelid	Und	2	0.3	10.2
22	Retinal Dysplasia (folds)	R	2	0.3	10.2
23	Corneal Dystrophy	Und	1	0.2	8.4

Bedlington Terriers

Intestinal/Liver/Pancreas

24	Bloat, volvulus, torsion	Und	2	0.3	10.2
25	Irritable Bowel Syndrome	Und	9	1.6	22.6
26	Copper Toxicosis	R	74	12.9	46.0
27	Megaesophagus	Und	1	0.2	8.4
28	Exoc. Pancreatic Insufficiency	R	5	8.9	17.0
29	Protein Losing Enteropathy	Und	4	0.7	15.2

Bedlington Terriers

Immune System Diseases/Ears

30	Atopic Dermatitis	Und	16	2.7	27.4
31	Demodectic Mange	Und	1	0.2	8.4
32	Systemic Lupus Erey	Und	1	0.2	8.4
33	Auto. Hemo. Anemia	Und	4	0.7	15.2
34	Deafness	Und	19	3.3	29.5
35	String Ears	R	1	0.2	8.4

Bedlington Terriers

Oral Disorders

36	Extra Teeth	Und	2	0.3	10.2
37	Missing Teeth	R/Und	7	1.2	19.4
38	Overshot	Und	3	0.5	13.1
39	Undershot	Und	14	2.4	26.0
40	Wry Mouth	Und	2	0.3	10.2
41	Cleft Palate	Poly	5	0.9	17.0

Bedlington Terriers

Neurologic Diseases

42	Hydrocephalus	Und	1	0.2	8.4
43	Degenerative CNS Disorder	?	2	0.3	10.2
44	Epilepsy	R/Und	14	2.4	26.0

Bedlington Terriers

Urinary Diseases

45	Glomerulonephritis (young)	Und	4	0.7	15.2
46	Renal Hypoplasia	Und	1	0.2	8.4

Bedlington Terriers Behavior Disorders/ Reproductive Diseases

47	Aggression	Und	13	2.3	25.5
48	Rage Syndrome	Und	2	0.3	10.2
49	Cryptorchidism	R/Und	6	1.1	18.6

Bedlington Terriers

Skeletal Diseases

50	Crooked Tail	Und	15	2.6	27.0
51	Luxated Patella	R/Und	8	1.4	20.8
52	Spondylosis Deformans	Poly	2	0.3	10.2
					<hr/>
					871.6

Bedlington Terriers

**BEDLINGTON TERRIERS
HAVE 52 GENETIC
DISEASES**

APPROXIMATELY 46.7% OF
BEDLINGTON TERRIERS ARE
AFFECTED WITH A GENETIC
DISORDER OF ONE TYPE OR
ANOTHER

ON THE AVERAGE EACH
BEDLINGTON TERRIER
CARRIES 8.7 DEFECTIVE
GENES

WHAT DO YOU THINK?

46.7% OF ALL BEDLINGTON TERRIERS
HAVE A DEFECT, AND ON THE
AVERAGE EACH BEDLINGTON
CARRIES 8.7 DEFECTIVE GENES
ARE BEDLINGTON TERRIERS
BAD DOGS?

NO!

AT LEAST NOT IN MY OPINION

BEDLINGTON TERRIERS, LIKE
ALL OTHER LIVING THINGS,

ARE MUTABLE

AS A RESULT MUTATIONS
OCCUR OVER A PERIOD OF
TIME AND THEY TEND TO
ACCUMULATE IN A BREED

**BEDLINGTON TERRIERS
ARE NO WORSE THAN
YOU AND I ARE**

ON THE AVERAGE EACH OF
US CARRIES 3 TO 5 LETHAL
EQUIVALENTS

AND MANY OF US -- MORE
THAN HALF -- HAVE AT LEAST
1 GENETIC DEFECT

IF WE HAVE ENOUGH
INFORMATION ON OTHER
BREEDS, IT TURNS OUT THAT
THEY ARE ABOUT LIKE
BEDLINGTON TERRIERS

Breed	Number of Diseases	Frequency of Affected Dogs %	Average Number of Defective Genes Per Dog
Scottish Terrier	41	33.3	4.7
Cairn Terrier	46	40.2	5.0
Bichon Frise	47	29.8	4.6
Newfoundland	50	66.5	4.5
Bernese Mountain Dogs	52	68.0	10.2
White Shepherd	57	40.0	7.1
PBGV	49	58.9	7.9
Shiloh Shepherd	46	46.9	8.0
Bouvier des Flanders	42	49.8	8.0
Rhodesian Ridgeback	59	45.8	6.6
Greater Swiss Mountain Dogs	51	65.0	10.0
Entlebuchers	30	18.5	5.9
Bedlington Terrier	52	46.7	8.7

WHY IS IT LIKE THIS?

THAT'S EASY TO ANSWER

IT'S BECAUSE NOBODY DOES
ANYTHING ABOUT IT

OVER THE YEARS THERE HAS
BEEN LITERALLY NO EFFORT
TO CONTROL GENETIC
DISEASE IN PUREBRED DOGS

NOT JUST
BEDLINGTON TERRIERS

THE SAME IS TRUE FOR
NEARLY ALL BREEDS OF
DOGS

THERE ARE A FEW
EXCEPTIONS

Breed

Diseases

- | | | |
|---|----------------------|--------------------|
| 1 | Alaskan Malamute | Malamute Dwarfism |
| 2 | Inland Empire Collie | Collie Eye Anomaly |
| 3 | Portuguese Water Dog | “Storage Disease” |
| 4 | Miniature Schnauzer | Juvenile Cataracts |
| 5 | Boxer (England) | Boxer Axonopathy |

YOU CAN CONTROL GENETIC
DISEASE
THESE CLUBS HAVE PROVEN
THAT

BUT!!

IT DOESN'T JUST "HAPPEN"

**“MOTHER NATURE” WON’T
DO IT FOR YOU**

**“MOTHER NATURE” DOESN'T
HAVE ANYTHING TO DO WITH
BREEDING PUREBRED DOGS**

YOU DO

IF YOU WANT SOMETHING TO
“HAPPEN”

YOU HAVE TO DO IT OR IT
WON'T GET DONE

WELL!!

**THE FACT IS YOU HAVE
ALREADY STARTED**

THE DATA IN YOUR SURVEY
IS THE START

IT TELLS YOU HOW SERIOUS
THE PROBLEM IS

**46.7% OF ALL THE DOGS YOU
PRODUCE HAVE A GENETIC
DEFECT**

ALTHOUGH THERE ARE 8 OF
THE 52 TRAITS THAT MIGHT
REASONABLY BE CALLED
FAULTS RATHER THAN
DISEASES

	Disease	Frequency Per 100 Dogs	Minimum Guestimated Carrier Frequency
1	Hypothyroidism	4.5	33.2
2	String Ears	0.2	8.4
3	Extra Teeth	0.3	10.2
4	Missing Teeth	1.2	19.4
5	Overshot	0.5	13.1
6	Undershot	2.4	26.0
7	Cryptorchidism	1.1	18.6
8	Crooked Tail	2.6	27.0
	Totals	13.3	155.9

IF WE TAKE THOSE FAULTS
OR DISORDERS INTO
CONSIDERATION, IT LOWERS
THE FREQUENCY OF DISEASE
AND THE NUMBER OF
DEFECTIVE GENES PER DOG

HOWEVER
THE REASON I LISTED THESE
“FAULTS” IN THIS REPORT IS
THAT MOST BREEDERS THINK
OF THEM AS SERIOUS
BECAUSE
ALL BUT ONE OF THEM CAN
BE SEEN

IF THE AVAILABLE DATA IS A
START, HOW DOES IT HELP
US?

SEVERAL WAYS IF YOU ARE
WILLING TO TAKE THE NEXT
STEP

**1. WE NEED TO IDENTIFY THE
DOGS THAT HAVE GENETIC
DISEASES**

**2. WE NEED AN OPEN
REGISTRY**

**3. IT IS VERY DIFFICULT IF
NOT IMPOSSIBLE TO
PROCEED WITHOUT THIS
KNOWLEDGE**

WHY?

THE WHY IS EASY TO
ANSWER

KNOWLEDGE ABOUT
AFFECTED DOGS TELLS YOU
WHERE THE DEFECTIVE
GENES ARE

KNOWLEDGE ABOUT
PHENOTYPICALLY NORMAL
DOGS TELLS YOU NOTHING
ABOUT THE GENOTYPE
(WHETHER THE ANIMAL IS A
CARRIER OR NOT)

Risk of being a carrier if related to an affected dog (autosomal recessive trait)

	Relationship	Degree of Relationship	Minimum Carrier Risk
1	Parent, progeny	1	100%
2	Full brother/sister	1	66.6%
3	Grandparents, aunts, uncles, 1/2 brothers and sisters, grandchildren	2	50.0%
4	Niece, nephew	2	33.3%
5	Great grandparent, 1 st cousins, 1/2 aunts and uncles, great grandchildren	3	25%
6	Great-great grandparents, 1 st cousin once removed, second cousins	--	12.5%
7	Great-great-great grandparent, 1 st cousin twice removed, 3 rd cousins	--	6.25%

Affected

**Risk
Generation**

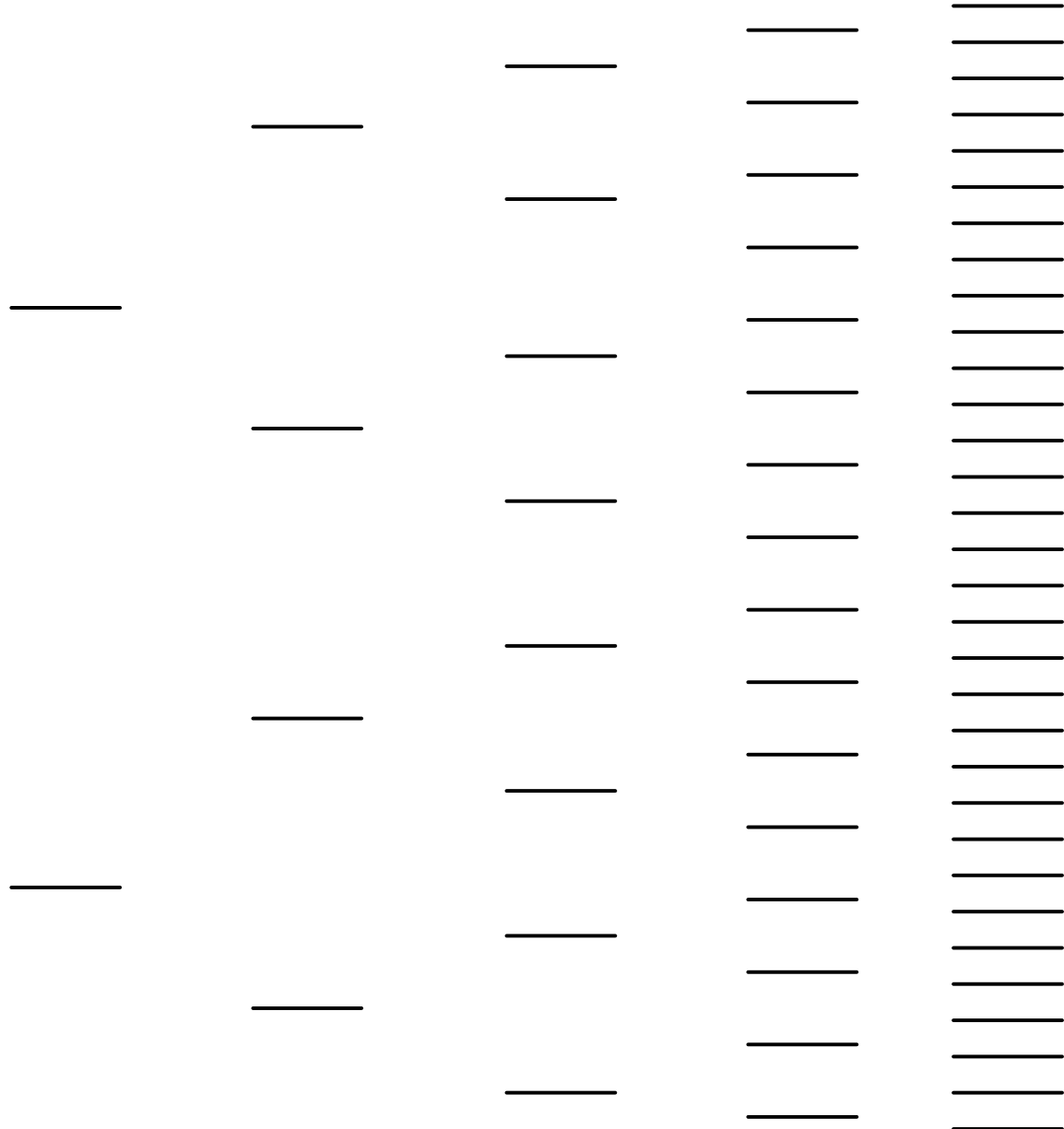
**100%
1**

**50%
2**

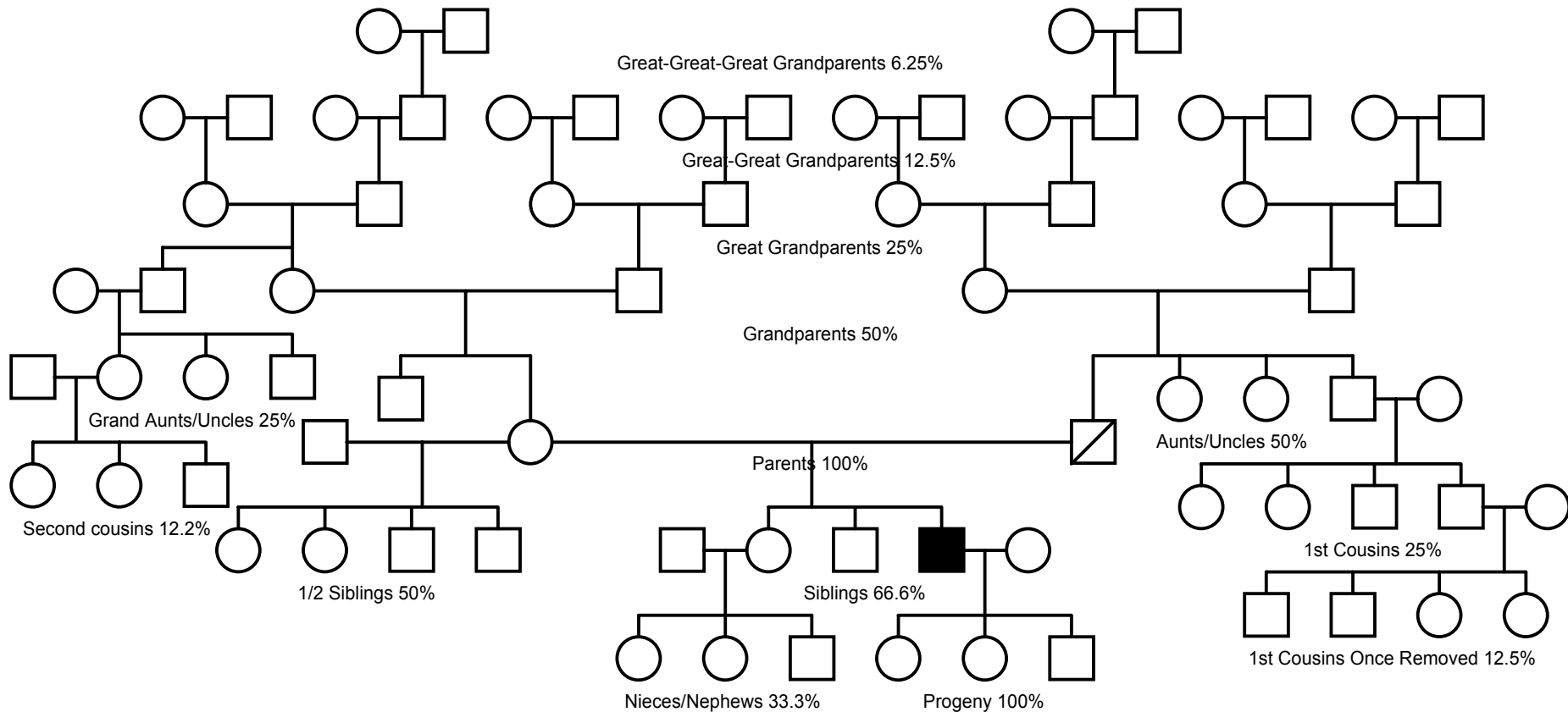
**25%
3**

**12.5%
4**

**6.25%
5**



Geneticist's Pedigree Showing the Minimum Carrier Risks Various Dogs Have When Related to an Affected Dog (Autosomal Recessive Trait)



RISK OF BEING A CARRIER IF RELATED TO AN AFFECTED DOG (AUTOSOMAL RECESSIVE TRAIT)

	RELATIONSHIP	DEGREE OF RELATIONSHIP	MINIMUM CARRIER RISK
1	PARENT, PROGENY	1	100%
2	FULL BROTHER/SISTER	1	66.6%
3	GRANDPARENTS, AUNTS, UNCLES, 1/2 BROTHERS AND SISTERS, GRANDCHILDREN	2	50.0%
4	NIECE, NEPHEW	2	33.3%
5	GREAT GRANDPARENT, 1 ST COUSINS, 1/2 AUNTS AND UNCLES, GREAT GRANDCHILDREN	3	25%
6	GREAT-GREAT GRANDPARENTS, 1 ST COUSIN ONCE REMOVED, SECOND COUSINS	--	12.5%
7	GREAT-GREAT-GREAT GRANDPARENT, 1 ST COUSIN TWICE REMOVED, 3 RD COUSINS	--	6.25%

SO! WE HAVE A COUPLE OF
PEDIGREES AND
INFORMATION ABOUT RISK

HOW DO WE USE IT?

REMEMBER, THIS IS BASED
UPON KNOWLEDGE ABOUT
AFFECTED DOGS AND YOUR
DATA

AND REMEMBER THIS IS A
RULE-OF-THUMB
NOT A LAW

IF YOU OWN THE NIECE OR
NEPHEW OF A DOG WITH
VALVULAR DISEASE OR
HYPOTHYROIDISM OR
CATARACTS AND THERE I NO
OTHER NEGATIVE
INFORMATION ABOUT THEM

YOU CAN BREED THEM AND YOU WILL NOT BE HARMING THE BREED AS A WHOLE

EMPIRIC RISK FOR A NIECE OR NEPHEW	33.3%
VALVULAR DISEASE	29.5%
HYPOTHYROIDISM	33.2%
CATARACTS	40.0%

IF YOU OWN THE 1ST COUSIN, A
GREAT GRANDPARENT OR HALF
AUNT OR UNCLE OF A DOG OR BITCH
AFFECTED WITH

- | | | |
|----|-------------------|-------|
| 1. | DISTICHIASIS | 24.1% |
| 2. | ATOPIC DERMATITIS | 27.4% |
| 3. | UNDERSHOT | 26.0% |

YOU CAN BREED THEM AND YOU WILL NOT
BE HARMING THE BREED AS A WHOLE
BECAUSE THE EMPIRIC RISK, THE RISK
THAT MUST OCCUR BECAUSE THEY ARE
RELATED TO AN AFFECTED DOG, IS LESS
THAN THE GENERAL RISK, WHICH WE
ENCOUNTER IF WE MAKE A RANDOM
MATING IN THIS BREED
RISK FOR 1ST COUSIN, ETC. = 25%

AND YOU KNOW THE
SPECIFIC EMPIRIC RISK FOR
THESE DOGS SO YOU CAN
PROTECT YOURSELF BY
SELECTED MATINGS

**WE NEED TO DISCUSS THIS
SURVEY IN RELATIONSHIP TO
MATADORS AND DISEASE
PREVENTION AND CONTROL**

**MATADORS ARE DOGS THAT
CONTRIBUTE A
DISPROPORTIONATELY HIGH
PROPORTION OF THEIR GENES TO
THE GENE POOL OF THE BREED AS
A WHOLE**

**THESE ARE DOGS THAT PRODUCE
MAY 70 OR 80 TO 200-300 OR MORE
PUPPIES**

**THIS IS THE
“FOUNDER EFFECT”
IN DOGS**

**GENETIC DISEASE
DESPITE WHAT EVERYONE SAYS
IS NOT SPREAD
BY INBREEDING**

**IT IS SPREAD
BY OUTCROSSING:
BY MATADORS**

**ASIDE FROM BEING PROLIFIC,
WHAT IS A MATADOR?**

**THEY ARE THE BEST DOGS
IN THE BREED**

**YOU DON'T GET
TO BE A MATADOR
IF YOU ARE NOT**

IF YOU HAVE A SPECIALTY
WINNER, HE WILL PROBABLY
GET 4 OR 5, MAYBE EVEN 8
OR 10 MATINGS. HE WILL
PRODUCE 30 OR 40 PUPS,
MAYBE EVEN 70.

BUT!

**VERY MUCH BEYOND THAT
AND HE HAS TO PRODUCE
WINNERS**

OR

PEOPLE WILL NOT CONTINUE
TO USE HIM

MATADORS
PRODUCE WINNERS

SO

MATADORS PRODUCE WINNERS
AND LOTS OF PUPPIES

WHAT ELSE DO WE KNOW ABOUT
THEM?

**WE KNOW THEY PRODUCE
DEFECTS**

HOW DO WE KNOW?

GOSSIP

TRY TO THINK OF ONE
BEDLINGTON TERRIER
MATADOR

ONE BEDLINGTON
SUPER DOG

THAT HAS NOT PRODUCED A
DEFECT

MOST HAVE PRODUCED
MORE THAN ONE DEFECT

CAN YOU THINK OF ONE?

IF SO, WHO?

OK!!

MATADORS PRODUCE DEFECTS

ARE THEY “GOOD” DOGS
EVEN “GREAT” DOGS

OF COURSE THEY ARE

LOOK AT WHAT
THEY HAVE DONE!!

THEY HAVE PRODUCED LOTS
OF WINNERS

LOTS OF OFFSPRING WHICH
FULFILL
THE CRITERIA FOR
WHAT WE WANT
IN A BEDLINGTON TERRIER

WHAT WE FIND OUT

BECAUSE THEY HAVE BEEN BRED

ACROSS THE BREED IS ALL OF THE

MAJOR DEFECTS THEY PRODUCE

WHAT WE NEVER FIND OUT
IS WHAT DEFECTS THEY
DON'T PRODUCE

**WE FACE THIS DILEMMA
BECAUSE WE DON'T TALK
ABOUT GENETIC DEFECTS**

WE WHISPER ABOUT THEM
SHH SHH SHH

SINCE BEDLINGTON TERRIERS
NOW HAVE A SURVEY HOWEVER
PERFECT
OR IMPERFECT IT MAY BE

**WE CAN DO MUCH BETTER
THAN WE HAVE IN THE PAST**

**IF WE WOULD TALK ABOUT
GENETIC DEFECTS**

**LIST THEM IN
AN OPEN REGISTRY**

WE COULD TELL YOU ALL
OF THE GOOD POINTS AS WELL AS
THE BAD POINTS ABOUT
A MATADOR

REMEMBER

BEDLINGTON TERRIERS AVERAGE

8.7 DEFECTIVE GENES

PER DOG

FROM THE STANDPOINT OF
GENETIC DISEASE MATADORS ARE
AVERAGE
BEDLINGTON TERRIERS

**WE SHOULD EXPECT THEM TO
CARRY 8.7 DEFECTS**

**NOW!
REMEMBER**

**BEDLINGTON TERRIERS
HAVE
52 GENETIC DEFECTS**

SO THE AVERAGE MATADOR IS
GENETICALLY NORMAL FOR
44 OTHER TRAITS

AND
WE DON'T KNOW
WHICH ONES

**BECAUSE
WE DON'T TALK
ABOUT DEFECTS**

**BECAUSE
WE HIDE DEFECTS**

**BECAUSE
WE LIE ABOUT DEFECTS**

WE CANNOT
FIND OUT ABOUT
WHAT'S NORMAL

UNLESS WE KNOW
WHAT'S ABNORMAL

WELL! WE HAVE EVERYTHING WE
NEED TO DO SOMETHING ABOUT IT
IF WE WANT TO

1. WE KNOW WHAT DISEASES WE
HAVE

2. WE KNOW THE FREQUENCY OF THE
TRAIT IN BEDLINGTON TERRIERS

3. WE KNOW THE FREQUENCY OF
CARRIERS OF THESE TRAITS IN
BEDLINGTON TERRIERS

LET ME SHOW YOU WHAT
SHOULD HAPPEN

HERE IS AN EXAMPLE OF A
MATADOR USING THE DATA
CURRENTLY AVAILABLE

BEDLINGTON TERRIER

MATADOR #1

BORN APRIL 1998

HE HAS HAD 33 LITTERS

PRODUCING 165 PUPPIES

HE IS A CHAMPION, HAS
WON 3 BEST IN SHOWS AND
WON THE BEDLINGTON
NATIONAL SPECIALTY
IN 1999

HE HAS PRODUCED 60
CHAMPIONS

36.3% OF ALL OF HIS GET ARE
CHAMPIONS

HE IS NORMAL BASED ON GDC
AND OFA EVALUATIONS FOR
HIPS AND ELBOWS

HE IS NORMAL FOR PATELLAS
BASED ON RADIOGRAPHS
AND PALPATION

**HE HAS PASSED HIS
CERF EXAMS
3 CONSECUTIVE YEARS FOR
EYE PROBLEMS**

HE IS CLINICALLY NORMAL
FOR HEART PROBLEMS

AND FOR ARGUMENTS SAKE
HE FITS ALL OF YOUR TYPES

IS HE BREEDABLE?

WOULD YOU LOOK AT HIM?

WAIT A MINUTE, THERE'S
SOME GOSSIP FLOATING
AROUND
THAT SAYS

HE HAS PRODUCED

1. CROOKED TAIL
2. DEMODECTIC MANGE
3. HYPOTHYROIDISM
4. ENTROPION
5. CATARACTS

6. RENAL HYPOPLASIA

7. MEGAESOPHAGUS

8. CRYPTORCHIDISM

IS HE STILL BREEDABLE?
WOULD YOU STILL LOOK
AT HIM?

**THE OWNER CONFIRMS
THAT HE HAS PRODUCED
ALL 8 TRAITS**

OK, WE HAVE A MATADOR
CARRYING 8
DIFFERENT TRAITS
WHERE DOES THAT LEAVE US?

SINCE WE KNOW WHAT
DISEASES THIS DOG HAS,
WE CAN ARRIVE AT THE RISK
HE IS GENETICALLY NORMAL
FOR THE TRAITS HE HAS NOT
PRODUCED

WE NEED TO USE
A RANDOM MATING
TEST MATING TABLE

GENETIC DISEASES OF THE BEDLINGTON TERRIER
MATADOR #1

	DISEASE	MODE OF INHERITANCE	NO. AFFECTED	FREQUENCY 0/100	THE MINIMUM GUESSTMATE OF CARRIER FREQUENCY	CHANCE MATADOR #1 IS FREE OF THE DISEASE
CANCER						
1	HEMANGIOSARCOMA/ HEMANGIOMA	POLY	5	0.2	17.0	99
2	MASTOSARCOMA	POLY	1	0.2	8.4	95
3	MALIGNANT HISTIOCYTOSIS	POLY	4	0.7	15.2	99
CARDIOVASCULAR DISEASES						
4	DILATED CARDIOMYOPATHY	UND	1	0.2	8.4	95
5	VALVULAR DISEASE (MURMURS)	UND	18	3.1	29.5	99
6	TRICUSPID VALVE DYSPLASIA	UND	1	0.2	8.4	95
7	MITRAL VALVE DYSPLASIA	UND	5	0.9	17.0	99
8	CARDIOMYOPATHY	UND	1	0.2	8.4	95

GENETIC DISEASES OF THE BEDLINGTON TERRIER
MATADOR #1

	DISEASE	MODE OF INHERITANCE	NO. AFFECTED	FREQUENCY 0/100	THE MINIMUM GUESSTMATE OF CARRIER FREQUENCY	CHANCE MATADOR #1 IS FREE OF THE DISEASE
SKIN DISEASES						
9	HYPERPIGMENTATION ALOPECIA	UND	2	0.3	10.2	97
10	SEBACEOUS ADENITIS	R/UND	1	0.2	8.4	95
11	PEMPHIGUS	UND	4	0.7	15.2	99
12	FAMILIAL FOOTPAD HYPERKERATOSIS	UND	3	0.5	13.1	98
ENDOCRINE DISEASES						
13	CUSHING'S DISEASE	UND	9	1.6	22.6	90
14	HYPOTHYROIDISM	R	26	4.5	33.2	--

GENETIC DISEASES OF THE BEDLINGTON TERRIER
MATADOR #1

	DISEASE	MODE OF INHERITANCE	NO. AFFECTED	FREQUENCY 0/100	THE MINIMUM GUESSTIMATE OF CARRIER FREQUENCY	CHANCE MATADOR #1 IS FREE OF THE DISEASE
OCULAR DISEASES						
15	CATARACTS	UND	45	7.8	40.3	--
16	DISTICHIASIS	UND	11	20	24.1	99
17	ENTROPION	UND	6	1.1	18.6	--
18	IMP. LACRI. PUNC.	UND	12	2.1	24.7	99
19	KERATO- CONJUNCTIVITIS SICCA	UND	6	1.1	18.6	99
20	PROGRESSIVE RETINAL ATROPHY	UND	1	0.2	8.4	95
21	PROLAPSED 3 RD EYELID	UND	2	0.3	10.2	97
22	RETINAL DYSPLASIA (FOLDS)	R	2	0.3	10.2	97
23	CORNEAL DYSTROPHY	UND	1	0.2	8.4	95

GENETIC DISEASES OF THE BEDLINGTON TERRIER
MATADOR #1

DISEASE		MODE OF INHERITANCE	NO. AFFECTED	FREQUENCY 0/100	THE MINIMUM GUESSTMATE OF CARRIER FREQUENCY	CHANCE MATADOR #1 IS FREE OF THE DISEASE
INTESTINAL/LIVER/PANCREAS						
24	BLOAT, VOLVULUS, TORSION	UND	2	0.3	10.2	97
25	IRRITABLE BOWEL SYNDROME	UND	9	1.6	22.6	99
26	COPPER TOXICOSIS	R	74	12.9	46.0	99
27	MEGAESOPHAGUS	UND	1	0.2	8.4	--
28	EXOC. PANCREATIC INSUFFICIENCY	R	5	8.9	17.0	99
29	PROTEIN LOSING ENTEROPATHY	UND	4	0.7	15.2	99

GENETIC DISEASES OF THE BEDLINGTON TERRIER
MATADOR #1

DISEASE		MODE OF INHERITANCE	NO. AFFECTED	FREQUENCY 0/100	THE MINIMUM GUESSTMATE OF CARRIER FREQUENCY	CHANCE MATADOR #1 IS FREE OF THE DISEASE
IMMUNE SYSTEM DISEASES/EARS						
30	ATOPIC DERMATITIS	UND	16	2.7	27.4	99
31	DEMODECTIC MANGE	UND	1	0.2	8.4	--
32	SYSTEMIC LUPUS ERETHEMATOSIS	UND	1	0.2	8.4	95
33	AUTO. HEMOLYTIC ANEMIA	UND	4	0.7	15.2	99
34	DEAFNESS	UND	19	3.3	29.5	9.9
35	STRING EARS	R	1	0.2	8.4	95

GENETIC DISEASES OF THE BEDLINGTON TERRIER
MATADOR #1

	DISEASE	MODE OF INHERITANCE	NO. AFFECTED	FREQUENCY 0/100	THE MINIMUM GUESSTMATE OF CARRIER FREQUENCY	CHANCE MATADOR #1 IS FREE OF THE DISEASE
ORAL DISORDERS						
36	EXTRA TEETH	UND	2	0.3	10.2	97
37	MISSING TEETH	R/UND	7	1.2	19.4	99
38	OVERSHOT	UND	3	0.5	13.1	98
39	UNDERSHOT	UND	14	2.4	26.0	99
40	WRY MOUTH	UND	2	0.3	10.2	97
41	CLEFT PALATE	POLY	5	0.9	17.0	99
NEUROLOGIC DISEASES						
42	HYDROCEPHALUS	UND	1	0.2	8.4	95
43	DEGENERATIVE CNS DISORDER	?	2	0.3	10.2	97
44	EPILEPSY	R/UND	14	2.4	26.0	99

GENETIC DISEASES OF THE BEDLINGTON TERRIER
MATADOR #1

	DISEASE	MODE OF INHERITANCE	NO. AFFECTED	FREQUENCY 0/100	THE MINIMUM GUESSTMATE OF CARRIER FREQUENCY	CHANCE MATADOR #1 IS FREE OF THE DISEASE
URINARY DISEASES						
45	GLOMERULO-NEPHRITIS (YOUNG)	UND	4	0.7	15.2	99
46	RENAL HYPOPLASIA	UND	1	0.2	8.4	--
BEHAVIOR DISORDERS/REPRODUCTIVE DISEASES						
47	AGGRESSION	UND	13	2.3	25.5	99
48	RAGE SYNDROME	UND	2	0.3	10.2	97
49	CRYPTORCHIDISM	R/UND	6	1.1	18.6	--
SKELETAL DISEASES						
50	CROOKED TAIL	UND	15	2.6	27.0	--
51	LUXATED PATELLA	R/UND	8	1.4	20.8	99
52	SPONDYLOSIS DEFORMANS	POLY	2	0.3	10.2	97

**BEDLINGTON TERRIERS
HAVE 52 GENETIC DISEASES**

APPROXIMATELY 46.7% OF
BEDLINGTON TERRIERS ARE
AFFECTED WITH A GENETIC
DISORDER OF ONE TYPE OR
ANOTHER

ON THE AVERAGE EACH
EDLINGTON TERRIER CARRIES 8.
DEFECTIVE GENES

FROM THE STANDPOINT OF
GENETIC DISEASE YOU NOW KNOW
EVERYTHING THERE IS TO KNOW
ABOUT BEDLINGTON TERRIERS
MATADOR #1

WHETHER YOU BREED TO THIS
DOG IS NOT SO
MUCH DEPENDENT ON HIM

IT'S DEPENDENT ON YOUR
BITCH AND LINE

WHAT DO THEY CARRY

THIS IS “YOUR” BITCH

SHE IS 2 YEARS OLD,
A NICE TYPY LADY
AND YOU THINK SHE
COULD GO SOMEWHERE,
SHE HAS A
LOVELY TEMPERAMENT

SO FAR SHE IS A CHAMPION,
HAS
WON 3 BEST
IN SHOWS AND 2
REGIONAL SPECIALTIES

SHE IS A VIRGIN BITCH

SHE HAS BEEN
RADIOGRAPHED
AND HAS NORMAL HIPS,
ELBOWS AND PATELLAS
BASED ON GDC AND OFA
EVALUATIONS

**SHE WAS CERF'D AND WAS
NORMAL AT 2 YEARS OF AGE**

HER HEART IS NORMAL
ON CLINICAL EXAMINATION

WOULD YOU BREED
THIS BITCH?

**THE OWNER CHECKED INTO
HER BACKGROUND
AND FOUND THAT:**

HER FATHER HAD
HYPOTHYROIDISM

WHAT'S HER CARRIER RISK?

100%

RISK OF BEING A CARRIER IF RELATED TO AN AFFECTED DOG (AUTOSOMAL RECESSIVE TRAIT)

	RELATIONSHIP	DEGREE OF RELATIONSHIP	MINIMUM CARRIER RISK
1	PARENT, PROGENY	1	100%
2	FULL BROTHER/SISTER	1	66.6%
3	GRANDPARENTS, AUNTS, UNCLER, 1/2 BROTHERS AND SISTERS, GRANDCHILDREN	2	50.0%
4	NIECE, NEPHEW	2	33.3%
5	GREAT GRANDPARENT, 1 ST COUSINS, 1/2 AUNTS AND UNCLER, GREAT GRANDCHILDREN	3	25%
6	GREAT-GREAT GRANDPARENTS, 1 ST COUSIN ONCE REMOVED, SECOND COUSINS	--	12.5%
7	GREAT-GREAT-GREAT GRANDPARENT, 1 ST COUSIN TWICE REMOVED, 3 RD COUSINS	--	6.25%

SHE HAS AN UNCLE ON HER
FATHER'S SIDE WITH
BLOAT/TORSION

WHAT'S HER CARRIER RISK?

RISK OF BEING A CARRIER IF RELATED TO AN AFFECTED DOG (AUTOSOMAL RECESSIVE TRAIT)

	RELATIONSHIP	DEGREE OF RELATIONSHIP	MINIMUM CARRIER RISK
1	PARENT, PROGENY	1	100%
2	FULL BROTHER/SISTER	1	66.6%
3	GRANDPARENTS, AUNTS, UNCLER, 1/2 BROTHERS AND SISTERS, GRANDCHILDREN	2	50.0%
4	NIECE, NEPHEW	2	33.3%
5	GREAT GRANDPARENT, 1 ST COUSINS, 1/2 AUNTS AND UNCLER, GREAT GRANDCHILDREN	3	25%
6	GREAT-GREAT GRANDPARENTS, 1 ST COUSIN ONCE REMOVED, SECOND COUSINS	--	12.5%
7	GREAT-GREAT-GREAT GRANDPARENT, 1 ST COUSIN TWICE REMOVED, 3 RD COUSINS	--	6.25%

**33.3% CHANCE SHE CARRIES
FOR BLOAT/TORSION**

SHE HAS A FIRST COUSIN
ONCE REMOVED THAT
IS OVERSHOT

WHAT'S HER CARRIER RISK?

RISK OF BEING A CARRIER IF RELATED TO AN AFFECTED DOG (AUTOSOMAL RECESSIVE TRAIT)

	RELATIONSHIP	DEGREE OF RELATIONSHIP	MINIMUM CARRIER RISK
1	PARENT, PROGENY	1	100%
2	FULL BROTHER/SISTER	1	66.6%
3	GRANDPARENTS, AUNTS, UNCLES, 1/2 BROTHERS AND SISTERS, GRANDCHILDREN	2	50.0%
4	NIECE, NEPHEW	2	33.3%
5	GREAT GRANDPARENT, 1 ST COUSINS, 1/2 AUNTS AND UNCLES, GREAT GRANDCHILDREN	3	25%
6	GREAT-GREAT GRANDPARENTS, 1 ST COUSIN ONCE REMOVED, SECOND COUSINS	--	12.5%
7	GREAT-GREAT-GREAT GRANDPARENT, 1 ST COUSIN TWICE REMOVED, 3 RD COUSINS	--	6.25%

12.5% CHANCE SHE IS A CARRIER

**SHE HAS A LITTERMATE
THAT HAS DISTICHIASIS**

WHAT'S HER CARRIER RISK?

**SHE HAS A 66.6% CHANCE
THAT SHE IS A CARRIER**

SHE HAS A GRANDPARENT
WITH COPPER TOXICOSIS

WHAT'S HER CARRIER RISK?

CARRIER RISK?

50%

SHE HAS A 3RD COUSIN
WITH STRING EARS

WHAT'S HER CARRIER RISK?

RISK OF BEING A CARRIER IF RELATED TO AN AFFECTED DOG (AUTOSOMAL RECESSIVE TRAIT)

	RELATIONSHIP	DEGREE OF RELATIONSHIP	MINIMUM CARRIER RISK
1	PARENT, PROGENY	1	100%
2	FULL BROTHER/SISTER	1	66.6%
3	GRANDPARENTS, AUNTS, UNCLER, 1/2 BROTHERS AND SISTERS, GRANDCHILDREN	2	50.0%
4	NIECE, NEPHEW	2	33.3%
5	GREAT GRANDPARENT, 1 ST COUSINS, 1/2 AUNTS AND UNCLER, GREAT GRANDCHILDREN	3	25%
6	GREAT-GREAT GRANDPARENTS, 1 ST COUSIN ONCE REMOVED, SECOND COUSINS	--	12.5%
7	GREAT-GREAT-GREAT GRANDPARENT, 1 ST COUSIN TWICE REMOVED, 3 RD COUSINS	--	6.25%

CARRIER RISK

6.25%

SHE HAS A 2ND COUSIN
THAT HAS PROLAPSED
3RD EYELID

CARRIER RISK

12.5%

**SHE HAS A NEPHEW
WITH DEAFNESS**

WHAT'S HER CARRIER RISK?

33.3%

RISK OF BEING A CARRIER IF RELATED TO AN AFFECTED DOG (AUTOSOMAL RECESSIVE TRAIT)

	RELATIONSHIP	DEGREE OF RELATIONSHIP	MINIMUM CARRIER RISK
1	PARENT, PROGENY	1	100%
2	FULL BROTHER/SISTER	1	66.6%
3	GRANDPARENTS, AUNTS, UNCLAS, 1/2 BROTHERS AND SISTERS, GRANDCHILDREN	2	50.0%
4	NIECE, NEPHEW	2	33.3%
5	GREAT GRANDPARENT, 1 ST COUSINS, 1/2 AUNTS AND UNCLAS, GREAT GRANDCHILDREN	3	25%
6	GREAT-GREAT GRANDPARENTS, 1 ST COUSIN ONCE REMOVED, SECOND COUSINS	--	12.5%
7	GREAT-GREAT-GREAT GRANDPARENT, 1 ST COUSIN TWICE REMOVED, 3 RD COUSINS	--	6.25%

LET'S SUMMARIZE THE DATA

YOUR BITCH

	DISEASE	EMPIRIC CARRIER RISK
1	OVERSHOT	12.5%
2	BLOAT/TORSION	33.3%
3	HYPOTHYROIDISM	100%
4	DISTICHIASIS	66.6%
5	COPPER TOXICOSIS	46.0%
6	STRING EARS	6.25%
7	PROLAPSED 3 RD EYELID	12.5%
8	DEAFNESS	33.3%

NOW WOULD YOU
BREED THIS BITCH?

LET'S LOOK AT "YOUR" BITCH IN
RELATIONSHIP TO A "GENERAL"
BITCH

YOUR BITCH

	DISEASE	EMPIRIC CARRIER RISK	GENERAL BREED RISK
1	OVERSHOT	12.5%	13.1%
2	BLOAT/TORSION	33.3%	10.2%
3	HYPOTHYROIDISM	100%	33.1%
4	DISTICHIASIS	66.6%	24.1%
5	COPPER TOXICOSIS	50%	46.0%
6	STRING EARS	6.25%	8.4%
7	PROLAPSED 3 RD EYELID	12.5%	10.2%
8	DEAFNESS	33.3%	29.5%

SINCE YOU KNOW WHAT
SHE CARRIES, WHETHER
YOU BREED THIS BITCH
OR NOT IS DEPENDENT ON WHAT
THE SIRE CARRIES

SHOULDN'T THAT BE TRUE?

**LET'S BREED THIS BITCH TO
MATADOR 1**

WHAT WOULD THE RESULT BE?

	MATADOR 1	RISK %	YOUR BITCH	EMPERIC CARRIER RISK %	RISK EACH PUPPY WILL BE AFFECTED %
1	CROOKED TAIL	100	OVERSHOT	12.5	0
2	DEMODECTIC MANGE	100	BLOAT/TORSION	33.3	0
3	HYPOTHYROID	100	HYPOTHYROIDISM	100	25
4	ENTROPION	100	DISTICHIASIS	66.6	0
5	CATARACTS	100	COPPER TOXICOSIS	50.0	0
6	RENAL HYPOPLASIA	100	STRING EARS	6.25	0
7	CRYPTORCHIDISM	100	PROLAPSED 3 RD EYELID	12.5	0
8	MEGAESOPHAGUS	100	DEAFNESS	33.3	0

SINCE NEITHER ONE APPARENTLY
CARRIES ANY OF THE OTHER
37 TRAITS THE RISK
IS SMALL THAT ANY OTHER DISEASES
REPORTED IN
THE SURVEY WILL OCCUR

VERY NEAT!!
NO DISEASE!!

WHY?

BECAUSE YOU KNOW
WHAT DISEASES
THEY CARRY

AND
YOU KNOW WHAT DISEASES
THEY DON'T CARRY

IS IT MAGIC?

**NO
IT'S GENETICS BASED
ON KNOWLEDGE**

LET'S LOOK AT WHAT WOULD HAVE
HAPPENED IF WE BRED BOTH OF
THESE DOGS RANDOMLY
(I.E. NO SURE KNOWLEDGE OF
THE GENETIC MAKEUP
OF THE MATE)

MATADOR 1

	DISEASE	HIS RISK %	GENERAL BREED RISK %	RISK FOR EACH PUPPY IN THE LITTER
1	CROOKED TAIL	100	27	6.8%
2	DEMODECTIC MANGE	100	8.4	2.1
3	HYPOTHYROID	100	33.2	8.3
4	ENTROPION	100	24.1	6.3
5	CATARACTS	100	40.3	10.3
6	RENAL HYPOPLASIA	100	8.4	2.1
7	CRYPTORCHIDISM	100	18.6	4.7
8	MEGAESOPHAGUS	100	8.4	2.1
				42.7
			5 puppies/litter	

THERE IS A 213.5% CHANCE YOU
WILL GET AT LEAST
1 PUPPY WITH ONE
OF THESE DISEASES
IN EACH LITTER

YOUR BITCH

	DISEASE	HER EMPIRIC RISK %	GENERAL BREED RISK %	RISK FOR EACH PUPPY IN THE LITTER%
1	OVERSHOT	12.5	13.1	4.1
2	BLOAT/TORSION	33.3	10.2	0.8
3	HYPOTHYROIDISM	100	33.2	8.3
4	DISTICHIASIS	66.6	24.1	4.2
5	COPPER TOXICOSIS	50.0	46.0	5.8
6	STRING EARS	6.25	8.4	0.2
7	PROLAPSED 3 RD EYELID	12.5	10.2	0.3
8	DEAFNESS	33.3	29.5	2.3
				26.0

5 puppies/litter

THERE IS A 130.0% CHANCE THAT
THERE WILL BE AT
LEAST 1 PUPPY AFFECTED WITH 1
OF THESE DISEASES
IN EACH LITTER

IN SUMMARY:
RANDOMLY BRED AMONG
BEDLINGTON TERRIERS,
THESE TWO DOGS
WILL AVERAGE

MATADOR #1	2.1
YOUR BITCH	1.3

AFFECTED PUPPIES
PER LITTER

IS THAT BAD?

**RIGHT NOW
YOU ARE AVERAGING
2.3 AFFECTED PUPPIES
PER LITTER OF
BEDLINGTON TERRIERS**

REMEMBER

WHEN WE WERE TALKING
ABOUT THE DISEASES THIS
DOG AND BITCH CARRIED,
YOU WERE NOT TOO HAPPY
WITH THEM

BUT BOTH OF THEM ARE
BETTER THAN THE AVERAGE
BEDLINGTON

SURE, DOC!!
THAT'S PRETTY NEAT
NO AFFECTED DOGS
IN THESE MATINGS
WHEN THE DOGS ARE
CORRECTLY BRED

BUT!

**LOOK AT ALL OF THE
CARRIERS YOU ARE
PRODUCING AND SPREADING
AROUND THE BREED**

I THINK YOU SHOULD
NEUTER THE SUCKERS

THAT'S WHAT I DID
WHEN MY DOG
PRODUCED PRA

GOOD! I COMMEND YOU!!

**THE FACT THAT YOU
NEUTERED YOUR DOG
BECAUSE IT PRODUCED
PRA TELLS ME**

THAT YOU CARE ABOUT
YOUR DOGS AND DON'T
WANT THEM TO PRODUCE
DISEASE OR CARRIERS

AND THAT YOU CARE
ABOUT YOUR BREED AND
THAT YOU WANT
BEDLINGTON TERRIERS
TO BE HEALTHY

SPAYING AND CASTRATING
IS ONE WAY TO DO IT

THE OTHER WAY IS
TO KNOW THE GENETIC
MAKEUP OF YOUR DOGS
AND THE PROPOSED MATES

**YOU MUST TALK ABOUT
AND IDENTIFY AFFECTED
AND CARRIER DOGS**

IF YOU DO THAT,
YOU WILL FIND THAT
YOU ALSO IDENTIFY
GENETICALLY NORMAL DOGS

OK

YOUR COMMENT ON
CARRIERS IS A GOOD ONE

LET'S SEE WHAT
REALLY HAPPENS

REMEMBER: WITH THE EXCEPTION OF
HYPOTHYROIDISM THE MATE
IN EACH CASE IS VERY LIKELY
TO BE GENETICALLY NORMAL
FOR EACH TRAIT CARRIED
BY THE OPPOSITE MATE

**THEREFORE:
WE ARE DILUTING
THESE TRAITS**

WE KNOW THE GENOTYPE OR THE
PROBABLE GENOTYPE
OF BOTH DOGS AND
WE CAN PREDICT
THE OUTCOME

IN MATADOR 1 SINCE HE IS A
PROVEN CARRIER HE WILL
TRANSMIT EACH DEFECTIVE GENE
THAT HE HAS
TO HIS OFFSPRING 1/2 OF THE
TIME (50% OF THE TIME)

THE OTHER 1/2 OF THE TIME THE
OFFSPRING WILL GET THE NORMA
GENE

**THE SAME IS TRUE
OF THE BITCH**

SO THE FACT IS THAT:

ON THE AVERAGE 1/2 OF
ALL THE DISEASES
WILL DROP OUT

WE WILL NOT KNOW
FOR SURE WHICH DISORDERS ARE
LOST AND WHICH ARE RETAINED

BUT: ON THE AVERAGE THE
PUPPIES WILL CARRY THE SAME
NUMBER OF
DISEASES AS THE PARENTS WITH
1/2 THE RISK FOR EACH DISEASE
THAT THE
PARENTS HAVE

LET'S LOOK AT THIS
IN TABLE FORM

MINIMUM CARRIER RISK OF THE OFFSPRING OF GREATER SWISS MOUNTAIN DOGS WHEN BRED TO MATES OF KNOWN GENOTYPE

DISEASE	MATADOR 1 RISK OF BEING A CARRIER	YOUR BITCH RISK OF BEING A CARRIER %	PUPPIES MINIMUM RISK OF BEING A CARRIER%
1 CROOKED TAIL	100	0	50
2 HYPOTHYROIDISM	100	100	66.6
3 ENTROPION	100	0	50
4 DEMODECTIC MANGE	100	0	50
5 CATARACTS	100	0	50
6 RENAL HYPOPLASIA	100	0	50
7 CRYPTORCHIDISM	100	0	50
8 MEGAESOPHAGUS	100	0	50

EACH PUPPY HAS MINIMAL
OR NO RISK OF CARRYING
FOR 37 OTHER
BEDLINGTON TERRIER
DISEASES

CARRIER RISK OF THE OFFSPRING OF GREATER SWISS MOUNTAIN DOGS WHEN BRED TO MATES OF KNOWN GENOTYPE

	DISEASE	YOUR BITCH RISK OF BEING A CARRIER %	MATADOR 1 RISK OF BEING A CARRIER %	PUPPIES RISK OF BEING A CARRIER %
1	OVERSHOT	12.5	0	6.25
2	BLOAT/TORSION	33.3	0	16.7
3	HYPOTHYROIDISM	100	100	66.6
4	DISTICHIASIS	66.6	0	33.3
5	COPPER TOXICOSIS	50.0	0	25.0
6	STRING EARS	6.25	0	3.2
7	PROLAPSED 3 RD EYELID	12.5	0	6.3
8	DEAFNESS	33.3	0	16.7

**EACH PUPPY HAS MINIMAL
OR NO RISK OF CARRYING
FOR 37 OTHER
BEDLINGTON TERRIER
GENETIC DISEASES**

REMEMBER:

**WITH THE EXCEPTION OF
HYPOTHYROIDISM, IF YOUR
BITCH IS BRED TO MATADOR 1,
ALL OF THE PUPPIES WILL HIGHLY
LIKELY BE PHENOTYPICALLY NORMAL
FOR ALL BEDLINGTON TERRIER
GENETIC DISEASES**

WHAT DO YOU DO WITH
THESE PUPPIES?

YOU SELL THEM

IF YOU SELL A PUPPY
AS A PET

THERE IS NO REASON TO DISCUSS
DISEASE EXCEPT TO SAY THAT
YOU BELIEVE THESE PUPPIES ARE AND
WILL STAY PHENOTYPICALLY
NORMAL FOR ALL BEDLINGTON
TERRIER DISEASES

AND YOU REQUIRE THAT
THEY BE SPAYED OR
CASTRATED OR GET A
NONBREEDING REGISTRATION
FROM THE APPROPRIATE SOURCE

IF YOU SELL A PUPPY
AS A BREEDER

PROVIDE EACH PURCHASER WITH
AN EXACT
STATEMENT OF THE RISKS
FOR EACH TRAIT
YOU KNOW ABOUT

**GET A SIGNED ACKNOWLEDGMENT
FROM
THE PURCHASER THAT
YOU TOLD HER/HIM
ABOUT THE RISKS INVOLVED**

IF THEY SAY TO YOU
WOW!! I CAN'T BUY
FROM YOU, LOOK AT ALL THE
DISEASES YOU HAVE

GIVE THEM A LIST OF THE 52 DISEASES
AND THEIR FREQUENCY THAT
WE KNOW OCCUR IN BEDLINGTON TERRIERS
AND SAY
IF SOMEONE DOESN'T TELL YOU WHAT'S
HAPPENING IN THEIR DOGS YOU CAN
LOOK FORWARD TO 1 OR MORE OF
THESE 52 DISEASES OCCURRING

IF THEY SAY TO YOU

MY GOSH!

I'M GOING TO GET ANOTHER
BREED

GIVE THEM A LIST OF THE DISEASES
WITH THE FREQUENCY THAT WE KNOW OCCUR
IN CAIRNS, BICHONS, SCOTTIES,
NEWFOUNDLANDS, BERNESE MOUNTAIN
DOGS, WHITE SHEPHERDS AND PBGVs,
SHILOH SHEPHERDS, BOUVIER DES FLANDRES,
RHODESIAN RIDGEBACKS
AND ENTLEBUCHERS

AND SAY

WHAT DO YOU THINK THE CHANCES
S THAT ALL OTHER BREEDS HAVE
ONLY NORMAL PUPPIES

IF THEY SAY TO YOU
MY GOODNESS GRACIOUS,
I'M GOING TO GET A MONGREL

GIVE THEM A LIST OF THE GENETIC
DISEASES
REPORTED IN MONGRELS

THERE ARE 215 WHICH IS
71 MORE THAN IS KNOWN
TO OCCUR IN ANY
PUREBRED BREED

THE REALITY IS THAT YOU HAVE
TO KEEP TRACK
OF THE CARRIER RISKS
IN THESE PUPPIES

IF YOU DO YOU CAN
BREED THEM SAFELY

IF YOU DON'T!

EVERYTHING IS UP FOR GRABS

RIGHT NOW!!
46.7% OF YOUR DOGS HAVE
OR DEVELOP A DEFECT AND
EACH BREEDING
BEDLINGTON TERRIER
ON THE AVERAGE
CARRIES FOR 8.7 DEFECTS

THE LAST POINT WE NEED TO
DISCUSS ABOUT MATADORS
AND DISEASE

IS WHAT ELSE DO
MATADORS DO
THAT'S GOOD FOR A BREED?

THEY TEST MATE
OUR FEMALES

THE AVERAGE BEDLINGTON
TERRIER MATADOR
TEST MATES YOUR FEMALES
FOR 8.7 GENETIC DISEASES
AT THE SAME TIME

THIS IS FOR THE MOST PART A
RETROSPECTIVE TEST MATING
BECAUSE YOU WON'T KNOW THE
DISEASES HE CARRIES UNTIL HE
HAS 20 OR 30 MATINGS AND THE
PUPPIES
HAVE TIME TO AGE

**BEDLINGTON TERRIERS
AVERAGE AROUND 5
PUPPIES PER LITTER**

SO ANY FEMALES THAT DO NOT
PRODUCE A PUPPY WITH
A DEFECT HE IS KNOWN TO CARRY
WILL BE ON THE
AVERAGE 76.3% SURE
TO BE FREE OF THE GENE
IN QUESTION

IF SHE PRODUCES A PUPPY WITH
DEFECT, SHE WILL STILL BE 76.3%
SURE TO BE FREE OF THE OTHER
TRAITS

REMEMBER,
THE CHANCE SHE IS FREE
IS DEPENDENT ON THE
NUMBER OF PUPPIES IN THE
LITTER SHE PRODUCES

SO, MATADORS SPREAD
GENETIC DISEASE, BUT THEY
ALSO TELL YOU HOW TO
ESCAPE FROM IT

OF COURSE, WE NEED TO BE
SMART ENOUGH TO HAVE AN OPEN
REGISTRY SO WE CAN KEEP
TRACK OF THE
GENES INVOLVED

Bedlington Terriers

**THERE ARE 52 GENETIC
DISEASES IN BEDLINGTONS**

**46.7% OF YOUR DOGS
HAVE A DEFECT**

**EACH DOG ON THE
AVERAGE CARRIES 8.7
GENES FOR GENETIC DISEASES**

Number of Genetic Diseases per Individual Dog by Breed

	Shiloh Shepherds		Bernese Mountain Dogs		Bedlington Terriers	
Total Dogs in Survey	356		1062		574	
No. of Genetic Diseases						
None	189	53.1%	340	32%	306	53.3%
1	92	26.1%	365	34.4%	190	33.1%
2	51	12.6%	201	18.8%	57	9.9%
3	16	4.5%	86	8.1%	15	2.6%
4	3	0.8%	41	3.9%	6	1.0%
5	4	1.1%	20	1.9%	0	0%
6	1	0.3%	7	0.7%	0	0%
7	0		1	0.09%	0	0%
8	0		1	0.09%	0	0%

THAT'S ALL FOLKS

QUESTIONS?