

## BACKGROUND & PURPOSE

The COA Litter Badging Program is a service provided to breeders and prospective owners that compares planned breedings against criteria set by the Health and CrossBreeding Committee. The criteria are intended to define key points that breeders should consider as they plan their litters, but are not a comprehensive list of all factors that should go into a responsible breeding decision. Qualifying planned litters will be awarded up to three badges for meeting Health, Diversity, and Performance benchmarks. Each badge has two levels - Silver and Gold.

The Program is designed to encourage breeders to include health, diversity, and working ability in planning their litters, in order to improve the long-term sustainability of the Chinook breed. It is also designed to help new breeders with a list of things to consider that they can discuss with their mentors and/or Committee members as they go about planning a first breeding.

It is important to note that the Program is completely voluntary - It in no way prevents breeders from using dogs or planning litters that do not comply with the criteria. In some cases, there may be solid reasoning behind breeding decisions that do not comply – for example, use of a dog that lives in an area without access to annual eye exams, who therefore cannot complete one of the Health badge criteria, or use of a healthy, well-tempered beloved family pet that has genetic diversity but has not participated in performance events. For these situations, breeders would be encouraged to consider litters that might qualify for one of the other badges or two, to balance out the inability to qualify for one. ***It is not envisaged that all litters could or should qualify for all badges, but that the criteria do encourage breeders to consider important drivers of health, diversity and working ability in the next generation.***

Overall, breeders should not limit their breeding considerations to the badge criteria - things like structure, temperament, and type are also critically important but more difficult to quantify. While conformation titles can help to validate a dog's basic good structure, and titles like the UKC SPOT and Therapy certification can earn a litter a Performance certification, breeders are strongly encouraged to use additional evaluations on structure and temperament in their breeding decisions.

Breeders with qualifying litters may use the badges on their websites to advertise those specific litters, and the COA Litter page and CQ Whelping Box will include them. As this is a voluntary program, litters that do not conform to the criteria, or those that breeders choose not to submit, will be included as well in the newsletter and on the website.

## PROCESS

All litters by default begin as Unbadged. Breeders must nominate planned litters with Litter Badging Form L-1 and submitting all documentation on parents demonstrating the litter meets Badge Criteria to the Health and CrossBreeding Committee. Within 1 month of receiving the nomination, the Committee will identify appropriate badges and notify the breeder, Webmaster and CQ editor.

Online health certifications may be referenced via a link, otherwise scanned copies of certificates from the issuing authority are required. In lieu of COI, the breeder may share an Optimal Selection report or print/scan a copy of the data from OS. The WDP Chair will validate any COA titles, and UKC certification/ titles must be included.

Breeders that submit litters for evaluation agree to participate in a brief annual survey about the process and criteria and in an annual survey about summary litter health results.

A summary of the criteria is included below:

		Silver	Gold
Health	1	Both Parents with permanent normal hip evaluations publicly available AND	Both Parents with above average permanent hip evaluations - PennHIP > 60th %ile or OFA Good or Excellent AND
	2	Both parents with Normal or Breeder's Option eye evaluations at 18 months or older AND	Both parents with Normal or Breeder's Option eye evaluations not older than 1 year at time of breeding AND
	3	At least one parent with a Normal or Breeder's Option eye evaluation in within a year of the planned breeding. AND	At least 1 parent is MDR1 Clear per genetic screening AND
	4	Both parents do not have the same Breeder's Option condition.	At least 1 parent is Dwarfism Clear per genetic screening
Diversity	1	5 Generation COI of the offspring <= that of both parents or 5%, whichever is greater OR the OS Health Index (Breeder Tool) is >= at least one parent AND	5 Generation COI of offspring < 5% OR OS Health Index of offspring > Current Chinook average OR One parent is an New Founder or F1/2/3 descendant of the Conservation Program AND
	2	Whole Pedigree COI (30 Generations) < 40% AND	Whole Pedigree COI (30 generations) < 36% AND
	3	The sire has <= 10 offspring OR no more than 2 litters	Sire has < 7 offspring AND no more than 2 prior litters
Performance	1	One Parent has a COA WDP Certification or UKC first-level title OR	Both parents have a COA WDP Certification or UKC first- level title OR
	1b	One Parent is a working dog - SAR, Service (not Therapy), working sled dog, etc.	One parent has 3 or more WDP Certifications / UKC first level titles OR
	1c		One parent has two or more WDP Titles / UKC Second level titles.

*Litter badges do not constitute a COA guarantee of health or working ability of any puppies.*

## DETAILS

### Health Category:

The purpose of the Health Badge is to ensure breeding stock is screened for known health issues in the breed, and that results are made public. As such, criteria include parents that have hip and eye evaluations (as adults) and are screened for the MDR1 and dwarfism gene. While we encourage breeders to not use dogs affected with seizures or allergies, there are currently no tests for these conditions and therefore they are not included as criteria.

The Silver badge requires the following criteria to be met:

1. Normal permanent (PennHIP @ > 1 year, OFA @ > 2 years) Hip evaluations have been completed for each parent and are publicly available, and
2. Eye evaluations have been completed for both parents after the parent was 18 months old with Normal or Breeder's Option results
3. At least one parent has a Normal or Breeder's Option evaluation within a year of the breeding.

The Gold badge sets a higher standard based on the results of the tests.

1. Both parents have above average permanent (PennHIP @ > 1 year, OFA @ > 2 years) hip evaluations – OFA Good or Excellent, or PennHIP  $\geq 60^{\text{th}}$  %ile.
2. Both parents have a Normal or Breeder's Option eye evaluations not older than 1 year at time of breeding
3. At least one parent is MDR1 Clear per a genetic screen
4. At least one parent is Dwarfism Clear per a genetic screen

For the purposes of this badge, "normal" hips are defined as no degenerative joint disease or osteoarthritis and PennHIP 50th %ile or greater, and/or OFA Fair, Good, or Excellent rating. If a dog has both OFA and PennHIP, only one rating needs to meet the above criterion. For both badges, if health information has not been made public with the OFA or other relevant authority, results can be sent in to the COA with the litter application. Any health certifications sent to the COA must include a release from the owner/breeder allowing results to be included in public health databases.

### Diversity Category:

The purpose of the Diversity Badge is to recognize breeders that are considering the genetic diversity of the litter, and of the breed, in their decisions. It requires either COI information which can be obtained from the Chinook Pedigree Project and/or actual genetic diversity information from the Optimal Selection (OS) genetic panel. This badge also seeks to limit the use of breeding dogs to prevent them from becoming popular sires/dams.

The Silver level requires the following 3 criteria be met:

1. The projected 5 generation Coefficient of Inbreeding (COI) of the offspring be lower than both parents, or lower than 5% in the event a parent's 5-gen COI is low itself, OR that the Optimal Selection offspring's Health Index be higher than at least one parent.
2. The whole pedigree (30+ generations) COI of a litter must be < 40%, and
3. The sire must not have more than 10 offspring or 2 prior litters.

The Gold level requires

1. The 5 gen COI of the offspring be < 5% OR the offspring OS Health Index be above Chinook average OR that an F1/2/3 descendant of the Conservation Program is used as a parent for the litter.
2. AND the full pedigree COI must be lower than Chinook average (as annually calculated by the CPP)
3. AND the stud must have <7 offspring and no more than 1 prior litter.

5 generation COIs are used due to the number of unknowns still in 8 generation Chinook pedigrees, and the remaining uncertainty over the North Wind pedigrees. It is expected this criterion should change over time, as should the overall whole pedigree COI measure.

Performance Category:

The purpose of the Performance Badge is to recognize those Chinooks that have demonstrated working ability in harness or other COA or UKC disciplines, and/or proper structure through conformation titles, and/or reasonable temperament and training for a Chinook. It should be noted that working ability, structure and temperament cannot be completely assessed through titles, and breeders are strongly encouraged to evaluate these traits individually and incorporate plans to improve them in their breeding programs. Non-titled working dogs (SAR, sled dogs, etc) are recognized through the Silver Badge at the discretion of the Committee. Breeders should provide evidence of the dog's work.

The Silver Badge requires

1. One parent to have a COA certification or UKC first-level title.
2. One parent to be a recognized working dog (SAR or Service Dog certified [NOTE: Therapy certification is not sufficient], working sled dog, working sheep dog, etc.)

The Gold Badge requires

1. BOTH parents to have WDP certification or UKC first-level title, OR
2. One parent to have three or more WDP certifications/UKC first level titles OR
3. One parent to have two or more WDP titles/ UKC second-level title.

Analysis:

All 28 Litters from 2014 & 2015 were evaluated against the criteria. The results indicate significant gaps in the Health category- primarily with public records of eye evaluations.

	Health	Diversity	Performance
Silver	7%	32%	29%
Gold	18%	25%	25%

Year	Breeder	Sire	Dam	Health	Diversity	Performance
2014	Bashaba	GreatMountain x Cedar Adahi	Bashaba Sakari Dawn	Gold	Gold	Gold
2014	GreatMountain	GreatMountain Walden's Dream	GreatMountain Franconia Notch			
2014	Spring Creek	Atoll Hurricane Nakoda Rain	Moonsong Law of the Jungle		Silver	
2014	Moonsong	Moonsong Never Cry Wolf	Boreayl's the Bees Knees of Moonsong		Gold	
2014	GreatMountain	GreatMountain Ashkii	GreatMountain Medomak			
2014	Wachusett	Sandhill's Linc of Channahon	Granite Hill Cascade range	Gold	Gold	Silver
2014	Silvertree	Granite Hill Odiome Point	Frontier in Bocca al Lupo		Silver	Gold
2014	Carrigain Mountain	Skyland Sabine Cuculann GreatMtn	GreatMountain Madison	Gold		
2014	Desert Sol	Aspen creek's Pal's Bro	MountainThunder Great Kyraina	Silver	Gold	Silver
2014	Granite Hill	Granite Hill Calypso	Granite Hill Eureka	Gold		Silver
2014	Granite Hill	Lakeside Run's Tannin	Granite Hill Suzie-B			Silver
2014	Great Valley	Forever Greene Berik	Daybreak Kenya Grace		Silver	
2014	Southwind	Southwind Tungortok Tatkrent	Cloudburst Ledgebak Kraumayok			Gold
2014	Seabreeze	GreatMountain Riley O'Jones	Tomorrow River Nicatou			
2014	Jersey Sherpa	Granite Hill Nemah Tsolo	Grand River Katara		Silver	
2014	Frontier	Frontier Jackson	Frontier Halone Joy Kasute		Silver	Silver
2014	Rain Mountain	Granite Hill Moses	Rain Mountain Skykomish River	Silver	Silver	
2014	Moonsong	Sugar River Jackjumper Song	Frontier Lady Luck		Silver	
2014	Canterbury	Skyland Sabine Cuculann GreatMtn	Granite Hill Kallie Abnaki Rain			
2014	Long's Peak	GreatMountain Cutler	Forever Greene Kinnisquq			Gold
2014	GreatMountain	GreatMountain Macwahoc	Daybreak GreatMt DownEast Sky			
2015	Gateway	Southwind Tungortok Tatkrent	Cloudburst LedgeBak Alaya			Silver
2015	MountainThunder	Cloudburst LedgeBak Eclipse	MountainThunder Terra Tomah		Gold	Gold
2015	Hurricane Rain	Moonsong Never Cry Wolf	Hurricane Elizabeth in the Rain			
2015	Forever Greene	Granite Hill Winnepesaukee	Forever Greene Qannik	Gold		Silver
2015	Bashaba	Frontier Luck of the Draw	Bashaba Sakari Dawn		Silver	Gold
2015	Carrigain Mountain	Granite Hill Shalapau Mamook	GreatMountain Grey Ghost		Gold	Silver
2015	Spook Nook	Callicoon Ukko	Moonsong Small Wonder		Silver	Gold