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# Origins and Breeding Strategies Of The Irish Hunting Horse.

Diploma Work

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# 1. Introduction.

## 1.1. Aim.

The aim of this thesis is to explore the origins of the Irish Hunter and follow, through time, the development and breeding objectives through to modern day. I hope to provide an insight into how the breed type originated and how it has changed over time in both classification and attributes. This report's objective is to demonstrate how the breeding of the foreign Thoroughbred with the native Draught, along with the Connemara has led, over time, to a breed that is admired as much in its own right as any that have come before it. We will see how the Irish Sport Horse, commonly referred to as the Irish Hunter, had achieved fantastic success in numerous sports and pastimes. From showjumping, eventing, dressage, hunting and leisure the Irish Sport Horse (ISH) has become vital to the Irish equine industry and has contributed hugely to the economy. The breed has also faced challenges in its history, from gaining recognition to receiving protection from watering down of the breed through outside influences. Bodies such as Horse Sport Ireland and government agencies have taken action to maintain and improve the breed and tackle said challenges which will be discussed later.

My intent is to show, through a review of historical, genetic and breeding documents how a breed has taken attributes from those that went before it, to become a staple of Irish equine life and a source of pride to all involved.

## 1.2. Introduction to and usage of the breed

The main composite breeds of the Irish Sport Horse are the Irish Draught, the Thoroughbred and Connemara. Varying proportions of these breeds result in the production of the traditional Irish Sport Horse. In recent years there has also been a significant infusion of Continental Warmblood breeds in the Irish Sport Horse.

The Irish Draught, used historically as a working farm horse, and Thoroughbred, a racing breed, has proved to be a very successful cross and gives the Irish Sport Horse its particular and favoured characteristics of strength, intelligence, athleticism, versatility and above all, a wonderful temperament. Irish Sport Horses have traveled all over the world and can be found competing successfully at the highest level in every equestrian discipline.

[www.equisearch.com](http://www.equisearch.com)

The traits previously mentioned have lead the breed to be used in a number of different competitive equestrian competitions. The jumping ability of the Irish Sport Horse has lead to widespread use as a showjumping horse. This ability has also led to its use in Three Day Eventing, which encompasses the discipline of Showjumping, a cross country time trail (also know as Hunter Trials) and Dressage. Many compete as dressage horses as their primary function, the intelligence and athletic ability provide a great base for success in this discipline.

As their name suggests, another primary function of the Irish Hunter (Irish Sport Horse) is for mounts during fox hunting, especially in Ireland and the United Kingdom. With a wide range of diverse and challenging obstacles to tackle during the pursuit, the Irish Hunters jumping ability, stamina, and bravery made it the perfect breed for such an event.

[www.horsesportireland.ie](http://www.horsesportireland.ie)

## 1.3. Irish Hunter Characteristics and confirmation

Although technically these are half-bred animals the Irish Sport tends to display uniformity in their confirmation. These animals were bred for hunting and their Irish Draft bloodlines provides them a sure-footedness in most terrains.

### Features

- Average height 15 – 18 hands
- Physique
- Head is well proportioned with a straight or slightly convex profile
- Eyes are large & expressive
- Ears are long & shapely
- Neck is long, muscular & often slightly arched
- Back is short
- Chest is full & deep
- Legs are solid with broad joints
- Traditional Colours
- All colours except pinto
- Temperament
- Solid & dependable
- Intelligent and easy to work with

The following is a guide to conformation traits used to assess mares for the Irish Sport horse guidebook, known as linear profiling:

#### CONFORMATION/TRAIT

Condition : fat — poor

Mouth : underbite — overbite

#### Head

convex profile

coarse

long

1. Body shape: rectangular — square
2. Body direction: uphill — downhill — short legged
3. Head neck connection: light — heavy
4. Length of neck: long — short. deep out of chest

5. Position of neck: vertical — horizontal
6. Muscling of neck: heavy — poor — ewe-neck
7. Height of withers: high — flat
8. Position of shoulder: sloping — straight
9. Line of back: roached — weak
10. Line of loins: roached — weak
11. Shape of croup: sloping — flat
12. Length of croup: long — short
13. Stance of forelegs: over at knee — back at knee — tied in — standing under
14. Stance of hind legs: sickle — straight  
cow hocked  
tied in  
abnormal hock  
abnormal stifle
15. Stance of pastern weak — upright

<http://www.horsesportireland.ie/wp-content/uploads/2014/01/Procedures-and-Guidelines-for-Irish-Sport-Horse-Mare-Inspections-Autumn-2014.pdf>

## 2.Literature review

### 2.1. Origins of the Irish Hunting Horse

To access the origins of the Irish hunter we need to examine the breeds that have traditionally been composed of. Namely, the Irish draught, the Connemara pony , the Thoroughbred and more historically the Irish hobby horse.

An ancient and extinct breed know as the Irish Hobby horse plays a very significant role in the development of the Irish sport horse. Irish Hobby Horse is a breed which has been recorded since the 13th century in Ireland. This breed is thought to provide the bloodline ancestry to modern breeds such as the Connemara Pony and the Irish Draught.

The breed is thought to get its name from the old Irish word for swift (obann). They were smaller horses, sometimes described as more like ponies, whose strength was in being light, agile, and swift.

The hobby's speed came, in part, from being well suited to the bogs, forests, and hills of Ireland. Being light and agile allowed it to move easily through such places, where the large English warhorse was at a disadvantage. Even in such rough conditions, hobelars—the men who rode them could cover an astonishing 60 to 70 miles a day, allowing them to make the lightning strike-and-retreat raids against the English in times of conflict.

Unlike the warhorse, trained for battle, the hobby was essentially a mode of transport.

(Bennett 2014)

The Kerry Bog horses of Ireland are probably the last population in the world of nearly pure Hobby extraction—indeed, the country people of Ireland refer to them as “old hobbies.” 19th century photos shows why they are considered horses, not ponies: Even though diminutive, they show horse conformation. A body clip and roached mane uncover surprisingly “dry” conformation derivative of the Hobby's ancient eastern ancestry. The Kerry Bog today rarely exceeds 12 hands in height and resembles its cousin the Icelandic horse. Recent genetic work has proven that the Kerry Bog is distinct from other Irish breeds such as the Connemara.



[\(McGahern, 2005\)](#)

Research with was undertaken by Dr. Emmeline Hill and Dr. Mim Bower in 2012, showed that Irish and English mares made a massive contribution to the genes of the thoroughbred we know today. The findings showed that an estimated 61% of the maternal genes of the modern thoroughbred can be directly traced back to Irish and British mares. The speed gene is thought to have come into the thoroughbred through one of these mares. In contrast only about 8% of the maternal genes came from Arab mares and Oriental mares contributed 31%.

[\(Hill, 2012\)](#)

The Thoroughbred is a famous racing breed which can trace its ancestry back to 3 stallions.

It was around the beginning of the 18th century that the three stallions that became the foundation of the breed arrived in England. These three stallion provide the lineage for all thoroughbreds. The stallions were form the oriental group - Arabians, Turks and Barbs which are native to the middle east, and they were bred with the larger native English mares and gave rise to the thoroughbred we know today. These 3 famous horses were Byerley Turk, Darley Arabian and the Godolphin Arabian.

The Thoroughbred was then used to breed with the native horses of Ireland such as the Irish Draught and Connemara

[\(Bower et al, 2010\)](#)

Though much of the Connemara Pony's early history is based on legend and fable, it is also said that Spanish horses contributed to the breed after the sinking of the Spanish Armada when it ran aground in 1588 in the 16th Century, the shipwrecked Andalusian horses on board were set loose and swam to shore and interbred with the wild native ponies thus refining the local native wild ponies.

For additional strength and stamina, Arabian blood was added in the 1700s. They were also crossed with Hackneys and Thoroughbreds. Most families owned a mare so they could sell her offspring for much-needed income, and even while pregnant she would be required to pull a plow or a cart filled with rock, turf, or people. Any animal that couldn't perform these tasks on a

daily basis was replaced. This difficult lifestyle helped the Connemara develop its trademark stamina and adaptability.

Too much crossbreeding began to dilute the pony bloodlines, so the Connemara Pony Breeders' Society, founded in 1923, for the purpose of taking steps that would lead to the preservation and improvement of the Connemara Pony. Despite this long and colourful history, the Connemara didn't become an "official breed" until the Connemara Pony Stud Book was first published in 1926. The book was compiled by 30 "mostly local" Connemara gentlemen, who were concerned about the dwindling population of local mares. The group formed the Connemara Pony Breeders Society with the sole purpose of promoting the best of these mares. In an effort to improve and invigorate the breed, the Society selected the best stallions from the area and persuaded local farmers to only use the services of those stallions.

Today's Connemara is gaining popularity throughout the world as both an adult and children's pony. Its temperament and adaptability makes it well suited to a variety of disciplines, from jumping to dressage to endurance.

[\(Feeley, 2003\)](#)

In the early part of the 20th century, the Irish farmer needed a more versatile horse than the popular heavy draft. He needed an animal that could work the land throughout the week, go fox-hunting all day Saturday, jumping anything he faced, and then be ready to bring the family trap to church on Sunday morning. It was from this need that the Irish Draught was born.

Over a century of selection has produced a warm-blooded breed that is very sound, sensible animals with good bone, substance and quality. The Irish Draught is neither as massive nor as heavily feathered as its name implies and has movement that is smooth and free, without exaggeration, and not heavy nor ponderous. Standing over a lot of ground, the Draught has an exceptionally strong and sound constitution, great stamina and an uncanny jumping ability. In addition, this breed possesses a fabulous temperament made up of willingness, intelligence, docility and common sense.

[\(M McGrath, JC Griffith - 2005 \)](#)

## 2.2 Breeding policy For the Irish hunting Horse.

Estimated breeding values (EBVs) are predictions of the genetic advantage that a stallion or mare will pass on to its offspring for a particular trait. The KWPN in Holland and other European studbooks are using genetic evaluations for stallions and mares very successfully.

(Lewis, 1980)

Horse Sport Ireland has compiled EBVs for jumping, conformation, movement, temperament and athleticism. In simple terms, a stallion with a high EBV in the region of 140 is more likely to breed jumpers than other stallions. EBVs estimate how much that improvement can be expected to be in the offspring. EBVs are expressed as an index, with an average value of 100. The higher the EBV figure, the better. A horse with an EBV of 140 for jumping will have a better chance of breeding jumpers than one with a value of 120. On the other hand, stallions with values below 100 are unlikely to improve that aspect in their offspring. The more information that is included in the EBV, the more reliable the results will be. The accuracy can range from 0 to 1. EBVs with an accuracy of 0.7 or greater have a good level of reliability. EBVs are not the absolute answer to breeding, but they are a good indication. As more results are included they will become more reliable. EBVs are yet to be developed for the sport of eventing. Estimated breeding values are a good indication of breeding traits. As regards to Equine Reproduction a guideline for farmers and small breeders is to view the Stallion, , and if possible also a viewing of some of the progeny, before deciding on the stallion best suited to an individual mare. Decisions should not be based on marketing material alone. Where stallions standing abroad are being used, access can be got to video footage of the stallion in competition and, if old enough, any offspring in competition; this will allow a more complete evaluation when combined with information on own and progeny performance. There is now an abundance of video footage available online at the touch of a button. (Aldridge - 2000)

## 2.3. Classification in Irish Hunter Studbook

### CLASSIFICATION OF STALLIONS IN THE MAIN SECTION OF THE ISH STUDBOOK

- ◆ APPROVED: Stallions that have met all veterinary and inspection/performance requirements. Approved stallions are eligible for Star Ratings, ranging from 1 to 5 stars, based on their own performance or their progeny's performance in FEI disciplines.
- ◆ RECOGNISED: Foreign bred performance stallions standing outside of Ireland that are registered in the main section of a studbook that is a full member of the World Breeding Federation for Sport Horses (WBFSH) and have met specified performance/progeny performance criteria and submit a declaration from their originating studbook stating that they have met the veterinary requirements for that studbook.
- ◆ PRELIMINARY APPROVED (PA): Stallions aged between 4 and 12 years of age that have met the veterinary requirements and the Stage 1 and Stage 2 inspection requirements.
- ◆ PRELIMINARY RECOGNISED: Foreign bred performance stallions aged between 4 and 12 years old, standing outside of Ireland that are registered in the main section of a studbook that is a full member of the WBFSH and meet specified performance and studbook criteria.
- ◆ NOT APPROVED 1 (NA1): Stallions that have met the veterinary requirements but have not met, or have not yet met, the inspection (conformation, movement, athleticism) or performance requirements. NA1 stallions can be upgraded to Approved status if they meet specified pedigree and performance criteria. Stallions that were previously classified as Section 1 (S1) are classified in this class.
- ◆ NOT APPROVED 2 (NA2): Stallions that have not met the veterinary requirements. Stallions that were previously classified as Section 2 (S2) are classified in this class.
- ◆ ENTRY (ENT): Stallions that have not come forward for a veterinary examination or inspection.

## ISH STALLION ASSESSMENT PROCESS

◆ STAGE 1: Stallions must be a minimum of 3 years of age to be presented for the Stage 1 inspection. Stallions undergo a veterinary examination (including X-Rays) and an assessment of their conformation, movement and athleticism using linear scoring. Movement is assessed both in hand and loose and athleticism is assessed by means of loose jumping. Older stallions can opt to have their athleticism assessed under saddle.

Stallions that meet the inspection and veterinary requirements are invited to participate in the Stage 2 inspections.

◆ STAGE 2: Stallions must be a minimum of 4 years of age to be presented for the Stage 2 inspection which is a ridden assessment. Stallions are required to complete a course of up to 8 fences ridden by their own rider and by a test rider appointed by HSI. Each stallion undergoes a further veterinary examination and an assessment of their gaits and athleticism under saddle.

Stallions that meet the veterinary and inspection requirements in the Stage 2 inspections are classified as 'Preliminary Approved (PA)' and proceed to Stage 3.

◆ STAGE 3: 'Preliminary Approved (PA)' stallions aged between 4 and 12 years of age undergo Stage 3 of the assessment process which involves a review of the stallion's own performance and/or his progeny's performance. This review takes place annually between the ages of 6 and 12 years and stallions that are deemed to have sufficient performance/progeny performance are upgraded to 'Approved'. Stallions with insufficient performance/progeny performance by the age of 12 years can be re-classified as 'Not Approved 1 (NA1)'.

## IRISH SPORT HORSE STUDBOOK STALLION STAR RATING CRITERIA 5

Sport Horse & Thoroughbred stallions that are classified as APPROVED, RECOGNISED or SUPPLEMENTARY APPROVED in the Irish Sport Horse Studbook are eligible to be awarded star ratings, ranging from 1 to 5, based on their performance and their progeny's performance in FEI disciplines. The following is the Irish Sport Horse Studbook Stallion Star Rating:

## Minimum Performances Required for each Rating Level

Rating Type	5 Star	4 Star	3 Star	2 Star	1 Star
<b>Stallion performance – Showjumping</b>	2 double clear rounds at CSI/CSIO 5* level in FEI competitions (GP or Nations' Cup class fence height at least 1.50m or equivalent 1,2)	2 double clear rounds at CSI/CSIO 3* or CSI/CSIO 4* level in FEI competitions (GP or Nations' Cup class fence height at least 1.50m or equivalent 2) or higher	2 double clear rounds at CSI/CSIO 3* level in FEI competitions or 2 double clear rounds in FEI competitions at a fence height of at least 1.45m at CSI/CSIO level or 2 top 4 placings in FEI speed classes at a fence height of at least 1.50m at CSI/CSIO level or higher	2 double clear rounds at CSI/CSIO 2* level in FEI competitions or 2 double clear rounds in FEI competitions at a fence height of at least 1.40m at CSI/CSIO level or 2 top 4 placings in FEI speed classes at a fence height of at least 1.45m at CSI/CSIO level or 2 double clear rounds at National 1.50m level 3 or higher	2 double clear rounds at National 1.40m level or equivalent 4 or higher or 2 top 4 placings in FEI speed classes at a fence height of at least 1.40m at CSI/CSIO level
<b>Eventing</b>	2 MERs <sup>15</sup> at CCI 4* level <sup>10</sup>	2 MERs <sup>15</sup> at CCI 3* level <sup>11</sup> or higher	2 MERs <sup>15</sup> at CIC/CNC 3* level or higher	2 Top 25% finishes at CCI 2* level <sup>12</sup> or higher	2 Top 10% finishes at CIC/CNC 2* level or higher
<b>Dressage</b>	2 placings at CDI/CDIO 5* level (big tour or equivalent) with a score of 65% or higher	2 placings at CDI/CDIO 4* level (big tour or equivalent) with a score of 65% or higher	2 placings at CDI/CDIO 3* level (big tour or equivalent) with a score of 65% or higher	2 placings at CDI 2* level (big tour or equivalent) with a score of 65% or higher	2 placings at Prix St Georges or Intermediate I level with a score of 65% or higher

Rating Type	5 Star	4 Star	3 Star	2 Star	1 Star
<b>progeny-Showjumping</b>	2 progeny each with 2 double clear rounds at CSI/CSIO 4* level in FEI competitions (GP or Nations' Cup class fence height at least 1.50m or equivalent <sup>2</sup> ) or higher	2 progeny each with 2 double clear rounds at CSI/CSIO 3* level in FEI competitions or 2 double clear rounds in FEI competitions at a fence height of at least 1.45m at CSI/CSIO level or 2 top 4 placings in FEI speed classes at a fence height of at least 1.50m at CSI/CSIO level or higher	2 progeny each with 2 double clear rounds at CSI/CSIO 2* level in FEI competitions or 2 double clear rounds in FEI competitions at a fence height of at least 1.40m at CSI/CSIO level or 2 top 4 placings in FEI speed classes at a fence height of at least 1.45m at CSI/CSIO level or 2 double clear rounds at National 1.50m level <sup>3</sup> or higher	2 progeny each with 2 double clear rounds at National 1.40m level or equivalent <sup>4</sup> or 2 top 4 placings in FEI speed classes at a fence height of at least 1.40m at CSI/CSIO level or higher	2 progeny each with 2 double clear rounds at National 1.30m level or equivalent <sup>5</sup> or higher
<b>Progeny-eventing</b>	2 progeny each with 2 MERs <sup>15</sup> at CCI 3* level <sup>11</sup> or higher	2 progeny each with 2 MERs <sup>15</sup> at CIC/CNC 3* level or higher	2 progeny each with 2 Top 25% finishes at CCI 2* level <sup>12</sup> or higher	2 progeny each with 2 Top 10% finishes at CIC/CNC 2* level or higher	2 progeny each with 2 Top 25% finishes at CCI 1* level <sup>13</sup>
<b>Progeny-Dressage</b>	2 progeny each with 2 top placings at CDI/CDIO <sup>4*</sup> level (big tour or equivalent) with a score of 65% or higher	2 progeny each with 2 top placings at CDI/CDIO <sup>3*</sup> level (big tour or equivalent) with a score of 65% or higher	2 progeny each with 2 top placings at CDI <sup>2*</sup> level (big tour or equivalent) with a score of 65% or higher	2 progeny each with 2 top placings at Prix St Georges or Intermediate I level or higher	2 progeny each with 2 top placings at National Advanced level with a score of 65% or higher

(Figure 1.)

## Supplementary Section

To qualify for entry into the supplementary section animals must meet the following criteria: -

Are identified in accordance with the studbook rules;-

Are judged to conform to the breed standard;-

Meet the minimum performance as laid down in the studbook rules; and -

Have no or partial breeding, or have breeding that does not qualify for automatic entry into the main section of the Irish Sport Horse Stud book, and have either passed studbook inspection or have met the criteria to achieve a 3\* rating in showjumping, eventing or dressage (through their own or progeny performance) in accordance with the Horse Sport Ireland Star Rating System; or-

Are by a stallion classified as Approved, Supplementary Approved (SA), Recognised, Preliminary Approved (PA), Preliminary Recognised (PR) or Supplementary Preliminary Approved (SPA) or by a stallion that was classified in one those classes at the time of covering and are out of a dam that has a valid identification document; or-

Have a dam that is classified in the supplementary section of the studbook and are not by a stallion classified as Approved, Supplementary Approved (SA), Recognised, Preliminary Approved (PA), Preliminary Recognised (PR) or Supplementary Preliminary Approved (SPA) or were not sired by a stallion that was classified in one those classes at the time of covering.

[\(Irish sport horse stallions studbook 2015\)](#)



## 2.4. Challenges and Initiatives

One particular challenge for breeders of the Irish Sport Horse is maintaining the integrity of the breed. Since ISH are used for such equestrian sports as showjumping, progressively more and more “foreign” breeds are being introduced in an effort to improve attributes such as jumping ability.

Due to the infusion of European warmbloods into the breeding programs, the ISH breed is being diluted as more of the draught and sport horse mares are being crossed with warmbloods rather than TBs.

In the late 1980’s 68% of sport horse mares visited Thoroughbred Sires. By 2011 this has dropped to an all time low of 12%.

[\(Bower et al, 2010\)](#)

It appears many breeders and sales yards are choosing short-term economic gains over heritage. Irish horses take a bit longer to develop than most other breeds, and it seems many buyers do not understand this. They are attracted to the flashy movement and jump many warmbloods show as 2 and 3-year-olds, rather than the prospect of waiting for the ISH to mature and reach full potential.

As a result the Irish breeders, instead of sending their good draughts and draught/TB mares to quality thoroughbred stallions as in the past, are responding to the market by crossing their mares with continental warmblood stallions hoping to expedite sales of their young stock. These Irish Draught/Warmblood crosses may show more toe-flicking flash as youngsters but they often lack the gallop, stamina and heart needed at the highest levels of Eventing. The characteristics that give warmbloods that big trot with the long stride and slow tempo do not necessarily help them on the cross-country course or in the hunt field.

If the sires are approved by the Irish studbook one can breed a warmblood mare to a warmblood stallion, and as long as the foal is born in Ireland, it can be fully registered as an Irish Sport Horse and receive a green registration book. Consequently, the average buyer is often unaware they are not getting a true Irish Sport Horse. This might be fine for those producing Show

Jumpers and Dressage horses, but for many Eventers it is a negative trend. As fewer and fewer of the traditional Irish Sport Horses are bred, the time-tested bloodlines are disappearing.

(Koenen et al; 2003 )

In an effort to establish a distinction for an Irish Sport Horse from Ireland only, the Traditional Irish Horse society was established. This group has for asked for a definition of Traditional Irish Horse (TIH) to be given to Irish Sport Horses that were bred in Ireland from Irish heritage. In a very recent development the Irish Sport horse studbook has announced a new initiative.

From 2017 all TIH foals registered in the Irish Sport Horse Studbook will have ‘Traditional Irish Horse Category ISH(TIH)’ referenced on their passports. Their TIH status will also be published on CapallOir where breeders now have the facility to filter search results for TIH horses, making them easier to identify.

In order to be eligible for this TIH Category equines must meet the following definition of a Traditional Irish Horse (TIH):

- Be registered in the Main Section of the Irish Sport Horse Studbook

And

- Have only the following breeds recorded in their pedigree: Irish Sport Horse, Irish Draught, Thoroughbred, Connemara Pony. Do not have any foreign ancestors recorded in their back pedigree

And

- Have no unknown ancestors in the first two generations

And

- All Irish Sport Horse ancestors from the second generation back with unknown/partial pedigree must have been born before 1982.

([www.traditionalirishhorse.ie](http://www.traditionalirishhorse.ie))

## Methods and Materials

### 3.1. Genetics

The Irish Sport Horse is usually comprised of a mix of Thoroughbred with Irish Draught. Further, the Irish Draught and the Connemara Pony arise from a Irish Hobby base- as does the Thoroughbred. Indeed, modern DNA research (Hill 2008 & 2012, Bower 2010) has confirmed that the genetically the closest related breeds to the Thoroughbred are the Irish Draught and Connemara Pony. The Irish Hobby was an ancient saddle- racehorse breed, therefore the Irish horse was always a sport horse.

The Irish Sport Horse is considered Ireland's most successful competition horse. The selective breeding of Draught bloodlines with Sport horse breeds and thoroughbred produces a truly exceptional equine athlete that excels and competes to the very highest levels in equestrianism. Renowned world wide for their wonderful temperaments and wiliness to work, the Irish Sport horse is a horse of distinction. With its longstanding and proven track record including Olympic legacies, the Irish Sport horse's performance, durability, and competitive longevity sees the studbook retaining number 1 in World Breeding Federation for Sport Horses (WBFSH) of which it holds 14 titles over 16 consecutive years. This consistency at the highest level over this number of years is a proven testimony to sporting excellence.

(Aldridge, 2000)

With Ireland's long tradition of hunting and showjumping it is not surprising that the Irish Sport Horse possess an innate talent for the equestrian sports of showjumping and eventing. The main composite breeds of the Irish Sport Horse are the Irish Draught and the Thoroughbred. Varying proportions of these breeds result in the production of Irish Sport Horses. In recent years there has also been an infusion of continental warmblood breeds into the Irish Sport Horse.

The Irish Draught and Thoroughbred has proven to be a very successful cross and gives the Irish Sport Horse it's unique, and much sought after, characteristics. The Irish Draught Horse gives

our sport horses strength, intelligence and a kind temperament, which are reflected in their performance and ability. The Thoroughbred blood brings athleticism to the breed and enables them to compete successfully at the highest level of every equestrian discipline.

[\(Gray, 1994\)](#)

In recent years there has also been an infusion of continental warmblood breeds into the Irish Sport Horse. Since the dawn of showjumping in Ireland Irish Sport Horses have been found competing at the highest level. Horses such as Boomerang, Ryan's Son, Cruising, and more recently, Flexible, Castlefield Eclipse, Lisona, and Roller Coaster have made their mark in the sport of showjumping. For generations Irish horses have also dominated the eventing circuit , performances of Biko, Custom Made and Supreme Rock and more recently horses such as Mr Medicott and Imperial Cavalier, to name but a few. Apart from its success at international level the Irish Sport Horse is an ideal leisure horse. Its ability to look after and help its rider in any situation makes the breed a safe and popular choice for the amateur rider.

[\(Koenen and Aldridge; 2002 \)](#)

## 3.2. Genetic defects

Luckily for breeders, since Irish Sport Horses are a product of cross breeding of several other breeds, specific genetic defects have been hard to identify.

We have to look at some of the make up breeds for the ISH to pin point some genetic defects that may carry from one breed to the ISH.

Since the modern preference is to breed European warmbloods with ISH, genetic defects of warmbloods need to be considered. Nowadays, the problem has a high prevalence in many equine breeds. Osteochondrosis, with or without intra-articular fragmentation, is a common finding in Warmblood horses.

([ncbi.nlm.nih](http://ncbi.nlm.nih))

In Connemara ponies, a foundation breed used in the make up of ISH, some genetics defects can be seen. Hoof Wall Separation is one such disease.

Hoof Wall Separation Disease (HWSD) is a genetic defect characterised by a hoof wall that easily breaks and cracks, and a normal appearing coronary band. The breaks and cracks begin to occur in young ponies. In severe cases the pony bears weight entirely on the sole of the foot which can lead to severe lameness. HWSD is inherited as an autosomal recessive trait. This means that carriers are completely normal and only animals with two copies of the mutation will show clinical signs of the disease. HWSD appears to occur only in the Connemara pony and the carrier frequency has been estimated to be about 14.8%. A DNA test for this specific mutation can determine if ponies are normal or if they carry one or two copies of the mutation. Ponies that carry two copies of the mutation are highly likely to be affected with the disease. Some cases are milder while others are more severe.

The VGL offers a DNA test for HWSD to assist owners and breeders in identifying affected and carrier ponies. The test uses DNA collected from mane hair thus avoiding invasive blood collection. Breeders can use results from the test as a tool for selection of mating pairs to avoid producing affected foals. (Sandman, 2015)

### 3.3. Performance Improvement

In order to discuss performance improvement in the ISH, we must first look at the organisation responsible for maintaining and improving the breed.

In December 2006 Horse Sport Ireland was set up by the Irish Ministers' for Agriculture and Sport. Joe Walsh the former Minister for Agriculture was appointed as Horse Sport Ireland's first Chairman. During 2007 the organisation recruited a CEO and Management Team and the Staff of the Irish Horse Board and the Equestrian Federation of Ireland transferred to Horse Sport Ireland.

On January 1st, 2008, the organisation became the Governing Body for equestrian sport in Ireland (32 counties) as recognised by the International Governing Body (FEI), The Irish Sports Council and the Olympic Council of Ireland (OCI).

In July 2008, the Department of Agriculture transferred responsibility for maintaining the Irish Horse Register to Horse Sport Ireland following a Special General Meeting of the Irish Horse Board.

Horse Sport Ireland's key activities are:

- Interface with the Government and government agencies on behalf of the sector;
- Act as the National Governing Body for Equestrian Sport as recognised by F.E.I, I.S.C, O.C.I. and Sport N.I.;
- Maintain the Irish Horse Register which incorporates the Irish Sport Horse and Irish Draught Horse Studbooks under license from the Department of Agriculture, Food and the Marine;
- Issue ID documents (pedigree and non-pedigree) for horses under licence from the Department of Agriculture, Food and the Marine;
- Run High Performance Programmes for selected equestrian disciplines;
- Run the National Horse Anti-Doping programme for equestrian sport;

- Run the National Equestrian Coaching Development programme with Coaching Ireland;
- Operate the online pedigree, progeny and Performance database – CapallOir.

[\(H.S.I. Annual Report, 2013\)](#)

The stated breeding objective of the ISH is, "To produce a noble, modern, correct, sound athletic sport horse with good basic paces, that is pleasant to ride with good temperament capable of competing in Showjumping, Eventing and Dressage at both National and International Levels

[\[irishsporthorse.com, 2013\]](#).

In terms of ISH the traits of most importance are gait, conformation, and Showjumping ability. With less importance placed on Dressage and fertility. This is in line with other studbooks

[\[WBFSH, 2013\]](#).

The World Breeding Federation for Sport Horses (WBFSH) produces studbook rankings each year based on a point-awarding system for horses participating in competition. The scores of the six best horses of each studbook are added to calculate the studbook classification. Since the WBFSH rankings were established in 1994, the Irish Sport Horse Studbook has taken top spot in the eventing rankings for 19 of the last 21 years highlighting the success of the Irish sport horse in this discipline. During the 1960s and 1970s, Ireland produced the best show jumpers in the world but more recently, foreign studbooks have been making significant progress in their breeding, production and marketing efforts with buyers increasingly sourcing horses in Europe. Subsequently, the WBFSH rankings of Irish show jumpers have declined. Dressage is becoming increasingly popular in Ireland, but does fall well behind its European neighbours in terms of participation in the sport.

Genetic evaluation is a scientific objective, statistical assessment of the genetic merit of horses. The results are published as Breeding Values (BVs) which are predictions of the genetic

advantage that a horse will pass on to its offspring for a particular trait. A horse's breeding value measures the difference between its genetic ability and the average of the population. HSI carries out a genetic evaluation for showjumping horses in Ireland. Breeding Values for showjumping ability at international level are produced which measures the difference between each horse's genetic ability for international level showjumping and the average genetic ability for showjumping for the Irish population.

These breed values are established through sources of information that are used in the genetic evaluation: pedigree, own performance and progeny performance. Breeding values for young stallions are based mainly on their pedigree, as they start a competitive career the emphasis shifts to be on their own performance and finally shifts again to their progeny as they begin competing. Progeny information is the most reliable source of information in the genetic evaluation process. Breeding values are calculated using information from a horse's own performance and from all of its relatives, including parents and progeny. Breeding values are published for stallions that have been classified or had progeny registered in the last three years and are classified as Approved (APP), Recognised (REC), Preliminary Approved, (PA), Supplementary Approved (SA), or Preliminary Recognised (PR) in the Irish Sport Horse Studbook. Breeding values for mares are available to owners, on request. Breeding values reflect the average of a stallion's progeny. Although all foals inherit half of their genes for each parent, luck still determines whether they inherit a "good" half, a "bad" half or an "average" half.

Pedigree information measures the show jumping ability of all of a horse's known relatives including parents, full- and half-siblings, grandparents, uncles, aunts etc. The amount of emphasis placed on a relative's performance depends on how closely they are related. For example, breeding values of young stallions that have yet to compete are based solely on their pedigree. Their sire contributes 50% of their genes and therefore, 50% of their breeding value. Grandires will contribute 25% of their genes, on average, and therefore 25% of their breeding value. Breeding values based on pedigree alone will be identical for all full siblings, however, when these horses start to compete, their own performances will be used to determine if they inherited a "good" set of genes or a "bad" set of genes and their breeding values will change accordingly. Breeding values based on pedigree alone are termed "pedigree indexes" in HSI publications to



allow for their easy identification. The inclusion of all recorded relatives in the genetic evaluation also ensures that stallion's breeding values have been adjusted to take into account the quality of the mares that he has been mated with. Breeding values based on progeny information tell us the degree to which a stallion has been a breed improver when crossed with Irish mares. Phenotypic measurements such as star ratings are affected by the number of high genetic merit mares that a stallion has covered, breeding values are not.

### [The Irish Sport Horse Studbook Genetic Evaluation Report 2015](#)

Own performance information is the second source of information used in the genetic evaluation and is combined with pedigree information to determine how much of the performance can be attributed to the horse's genes and

How much is due to its environment, e.g. rider, training. Breeding values based on own performances tell us if a horse is living up to the potential indicated by its pedigree. The third source of information is progeny performance, the relative importance of pedigree and own performance decreases as more progeny are recorded in sport.

#### Measurement of show jumping ability

The breeding objective of the Irish Sport Horse (ISH) Studbook is "to produce a performance horse that is sound, athletic with good paces and suitable temperament and capable of winning at the highest international level in FEI disciplines". It is vital that the genetic evaluation reflects a horses' ability to produce progeny that can compete successfully at the highest levels and this requires direct measurement of international performance.

In 2009, Horse Sport Ireland published a new breeding policy for the ISH studbook which introduced the award of star ratings to horses that are successful as performance horses or as progenitors. The ratings enable breeders to quickly identify older stallions with a proven track record and younger stallions that are out-performing their contemporaries and are the potential stars of the future. Star ratings and merits for stallions, mares and geldings are periodically reviewed and are based on all verifiable performances without time or geography limits. Star ratings are based

on the highest level in sport that a horse has achieved successfully (i.e. with at least two double clear rounds or a top four placing in single-round speed competitions).

Lifetime performance ratings are based on the star rating system and have been chosen as the measurement of performance for the genetic evaluation. This is based on comprehensive national level information from the SJI database and international results collated by HSI from the FEI and other sources.

This measure produces breeding values for stallions available to Irish breeders that take into account successful international level performances, reflect how well the stallions cross with Irish mares and can also provide breeding values for foreign based stallions based on their own performance. One difference between the genetic evaluation and the star ratings awarded to stallions is that the lifetime performance rating of all competing progeny of a stallion are included in the genetic evaluation, whereas star ratings are based on a stallion's best two progeny. Star ratings are a phenotypic measurement of performance reflecting the best of a stallion's progeny. Breeding values are a genetic measurement of the average improvement in performance of a stallion's progeny when compared to those of other stallions.

Lifetime performance ratings allow for the incorporation of international level performances in routine and timely fashion. They also allow for the incorporation of national level performances of the horses at national level in foreign countries and therefore can take into account the performances of horses that are exported at a young age. The methodology can be easily extended for use in other disciplines such as eventing when sufficient data is available and can be integrated with linear profiling information in the future.

Lifetime performance ratings are converted into a numeric score for each horse. This score reflects the percentage of

Irish Sport Horses that compete successfully at this level and measure the difference between the horse and the average ISH show jumper in standard deviation units.

[teagus.ie](http://teagus.ie)

### 3.4. Economic Contribution

The Irish Sport Horse makes a significant contribution to the Irish Economy. With a variety of avenues open to many ISH, leisure, hunting, showjumping, hunter trials and dressage, there are a number of revenue streams generated by the breed. They are for many breeders an important source of income.

(Kennedy, M. 1982)

The contribution of the Irish Sport Horse industry to the Irish Economy is in excess of €708 million per annum [Fahey, 2012]. Breeding is the largest sector and accounts for a total expenditure of €226 million (32%) within the economy [Fahey, 2012]. Out of the breeding section 18% of active broodmares (had a foal in the last three years) are Irish Draught mares. This shows the importance of the breed to the future of the ISH, as a foundation breed, and by extension the horse industry as a whole.

1. The contribution of the Irish Sport Horse industry to the Irish economy is in excess of €708 million per annum.
2. There are 12,512 full-time job equivalents in the Irish Sport Horse industry, of which 11,417 are directly employed.
3. There are 47,096 people involved in the Sport Horse sector and it was estimated that involvement with sport horses contributes to the household income of 29,295 people.
4. The current Sport Horse population is estimated at 124,000 animals in Ireland.
5. Expenditure specifically on goods and services has increased to €454 million in 2012 from €400 million estimated in the Profile of the Industry Report in 2007.

6. Breeding is the largest sector and accounts for a total expenditure of €226 million (32%) within the economy and there are 15,110 active breeders in the Irish Sport Horse sector.
7. The competition sector accounted for €135 million expenditure in the Sport Horse sector.
8. A total of €119 million is spent within the affiliated leisure sector, of which €35 million is expenditure on showing and country shows.
9. A total of 6,599 sport horses to the value of €26,100,062 were exported in 2011, with net exports amounting to €15.9 million.
10. There are 11,900 equine classes held at national country shows each year, helping to attract over 270,000 spectators of which 5% attend from overseas.

[\(Fahey, Alan 2012\)](#)

There are approximately 140 country shows in Ireland each year. Of the 540,620 spectators that attended these shows in 2011, 5% of the spectators came from overseas. The RDS Dublin Horse Show was the largest International show in 2012, with an Indecon report estimating that overseas tourists accounted for €3 million of the €43 million generated by the show that year (UCD Report, 2012). 99,000 overseas visitors engaged in equestrian activities while in Ireland in 2013 compared with 62,000 in 2010 .

[\(Failte Ireland, 2010 and 2013\).](#)

Sport horse trade is difficult to measure with research showing that approximately 70% of horses are sold privately. An examination of the cost of production relative to the price achieved at public auction conducted by Teagasc in 2013 showed that those selling at the bottom and middle

market prices were suffering a loss, while those selling in the top 20% of the market or at elite auctions were more likely to see a return on their investment.

[Teagus.com](http://Teagus.com)

## 4. Conclusions and Discussion

The Irish Hunter is a horse that is engrained in the fabric of the Irish equine industry. The breed's influence can be seen in many different sports and leisure activities. There are few, if any, other breed that can claim such success in so many equine sports, from Showjumping to dressage and hunter trials, to leisure activities such as hunting and general hobby horse, the Irish Sport Horse has proven itself to be a hugely adaptable and capable animal. This wide ranging ability and flexibility of use can be traced back to the rich history and wide range of breeds that went in to making this modern day utility horse. The influence of the ancient Irish hobby horse can not be ignored when considering the creation of this breed. Once described by Deb Bennett in an article as "The world's most important Horse Breed " (Bennett 2014), its hard to argue against such a statement when we consider the influence that now extinct breed had on modern day horses. Its influence has been seen from on everything from American quarter horses, to the three major foundation breeds of the Irish Sport Horse, namely the Irish Draught, The Connemara and The Thoroughbred. In fact research from Emmeline Hill in 2010 traced the speed gene in race horses back to the Irish Hobby.

Another important factor in the development of the Irish Sport horse was the way in which its ancestors were used in Irish life. The Irish hobby was used for day to day work on Irish farms, like many of the European warmbloods such as the Holsteiner and the Gelderlanders on German and dutch farms. The difference with the Irish breeds like the hobby and later the Draught and Connemara seems to be that they were also used for sport. Racing, hunting and jumping became part of these horse's life and so the sport element of the Irish horse has been inbred for generations. The most famous example of this probable came in 1752 when a wager between two farmers Cornelius O' Callaghan and Edmund Blake led to the first recorded "steeplechase" in history and was the origin of National Hunt racing which is hugely popular in Ireland and Great Britain today. The race from Buttevant Church to St. Leger Church in Doneraile, in Cork, Ireland was given the name Steeplechase (due to the tall steeple's of each church which were used as landmarks) and this name is still used today.

The future of the Irish Sport Horse is also due some consideration. With such a wide ranging inclusion of many horses that can be described as Irish Sport Horses, it is important that the standard of the breed and its origins and attributes are maintained. The Irish Sport Horse Studbook obviously plays an important role in the future of the breed. The ISH is know worldwide for its jumping ability, versatility, bravery, temperament and even its “5th leg”, a term used to describe its amazing ability to find balance on the most difficult Irish banks while hunting. To maintain these traits the classification, evaluation, and star rating system means that breeders can use a huge amount of relevant data to decide where to bring mares to ensure the best possible ISH foals in the future.

As mentioned earlier there has been growing concern in recent years about influence of “foreign blood” entering the breed from European warmbloods. While diversity of genetics has led to the current breed type, many are concerned that this will lead to a loss of the Irish characteristics of the horse. Many foreign buyers have been left disappointed when discovering at a later date that the ISH they bought from Ireland had more warmblood in its breeding than Native Irish genetics. In an effort to combat this trend and to try to protect genetics of ISH from Ireland. The Traditional Irish Horse Association (TIHA) was set up to promote the indigenous breed. They have campaigned for distinction to made between ISH who are defined as such through being born in Ireland, and ISHs who have generations of Irish blood and could be described as a Traditional Irish horse.

In an exciting new development, the studbook for Irish Sport Horses in 2017, will include a distinct section for Horses that only have Irish Sport Horse, Irish Draught, Thoroughbred, and Connemara Pony in their pedigree. Also must have no unknown ancestors in the first two generations and all Irish Sport Horse ancestors from the second generation back with unknown/partial pedigree must have been born before 1982. Horses who match this criteria will have the code ISH (TIH) Irish Sport Horse Traditional Irish Horse.

This new development may be very beneficial for the breed moving forward. By protection the native bloodline, positive characteristics of the breed that have made it so famous and successful worldwide, can be protected long into the future.

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