

by Leon Rasmussen

INBREEDING I am often asked how OWNER.
TO SUPERIOR OWNER.
FEMALE BREEDER got started.
Well, it all began at the Year during Derby THROUGH Week, 1988. Following the awards cere-DIFFERENT mony I moved into the cocktail INDIVIDUALS lounge of the

Part I Hyatt Regency with Leon Rasmussen, who had just received an award for his contribution to

horseracing. After a few drinks I told Leon about my idea of a monthly publication dedicated specifically to Thoroughbred breeding, since there was really no such publication in existence. Leon suggested that I start such a publication. I told him that I'd like to do it, but that, because I was relatively unknown at the time, the only way such a publication had a chance to succeed was if he were to write for it. Leon reminded me he had just retired That was five years ago!

Leon Rasmussen is one of the two or three most knowledgeable students of Thoroughbred bloodlines in the world today. I recently asked Leon if he would consider writing a multi-part series on his views concerning bloodlines, and he graciously consented.

Owner Breeder is proud to present this firstever series by world-renowned pedigree authority, Leon Rasmussen! - Jack Werk

It has been six years since my retirement—since being turned out to pasture, albeit without a full book. That retirement marked the end of 50 years with the same company and 37 years as the author of *Bloodlines*, the breeding column appearing in *The Daily Racing Form*.

When I started writing *Bloodlines* in 1950, my credentials amounted to having apprenticed a few years in the paper's editorial department, a rapturous fascination with racing and breeding and a major in journalism from a small college.

There was no family heritage in the sport and I possessed a very unscientific bent. So every new trend, every new pedigree, every new statistic, every new development, every new race result prompted an excitement that made me impatient for the next day. Nothing has changed. This is a sport like no other and, by its very structure, with so many challenging ramifications, it will always be that way.

Therefore, *Bloodlines*, from the very beginning, was mostly a column of observations. I quoted racing and breeding writers whose opinions I came to deeply respect and I absorbed and appreciated their theories and ideas. One of these was the late Abram S. Hewitt, the scholarly author of Sire Lines and The Great Breeders and Their Methods and, like me, an unabashed Anglophile, especially where racing and breeding were concerned. I was also captivated by the classic dicta of Federico Tesio and strongly attracted to the typological studies of Dr. Franco Varola, which consume a great many of my columns. My interest in Varola eventually led to my presentation and constant nurturing of Dr. Steven A. Roman's Dosage-A New Approach and its application to the American Classics, most specifically, the Kentucky Derby.

As you may properly judge from the preceding, I was an observer. I was a follower, not an innovator. I quickly accepted the precepts that breeding is an inexact science; that racing ability, especially in the male horse, is of great importance; that inbreeding, if used intelligently, will improve the breed; that there are felicitous "Nicks"; that there is Galton's law of ancestral contribution; that there was a Vuillier before there was a Varola; and that there

were many other theories along with quite a few fallacies.

I also began to appreciate "class in the dam" as a significant method for breeding a better racehorse. In accepting that fact, I also became aware that "class in the dam," if left to itself, meant that only those chosen few with superior race mares had a real opportunity to prosper in the highest quality racing.

Gradually my constant observation of thousands of pedigrees of top-class SWs convinced me that while "class in the dam" was certainly a welcome attribute, it was not an end unto itself. The more I observed, the more I believed in the family over the individual. The vital importance of the most revered tap root mares and the splendid tail-female lines tracing to them became an on-going obsession with me and, as the Thoroughbred population exploded internationally, I realized that these famous female families, even without class close-up, were doing exceptionally well in the production of major winners.

As these observations continued, I became more and more aware that SWs with inbreeding to a superior female family were outperforming their opportunities—especially if that inbreeding occurred through different individuals.

Finally, I felt I had something of my own to offer, although, to keep the record straight, I had read brief, cursory mentions of this method in several places, including *The Bloodstock Breeders' Review*, responsible for so many of the Turf's most wondrous literary treasures.

Therefore, a great deal of my writing and research, both before and since my retirement, has been concerned with what I refer to as "INBREEDING TO SUPERIOR FEMALE FAMILIES THROUGH DIFFERENT INDIVIDUALS."

Because of the aforementioned explosion of the Thoroughbred population, especially since WWII, there has been a scattering of quality bloodlines to the four corners of the Thoroughbred world, resulting in fewer opportunities to inbreed to these superior distaff families. In being sprinkled throughout the world these bloodlines became outcrosses for the best bloodlines in their new homes. This growth and diversification is having a profound effect on the direction of the Thoroughbred breed today.

Next month, in Part II, I will examine this profound effect in greater detail.





by Leon Rasmussen

INBREEDING According to eminent horseman FEMALE and breeding journalist, John Sparkman, in the August 3, 1991 issue of THROUGH the American weekly, The Blood-Horse, DIFFERENT the breed appears headed for a period of rule

Part II

by an "elite international Thoroughbred."

In his article, Sparkman notes that in about 300 years of the Thoroughbred, the

population curve has constantly been upward until recently. The General Stud Book (GSB) was first published in England in 1793. It traced the earliest recorded origins of the Thoroughbred as far back as the early 17th century. At that time there were about 800 mares in England with about 400 foals a year. From the statistics contained in the GSB, the Thoroughbred population expanded as follows:

	ENG/IRE		AMERICA	
YEAR	MARES	FOALS	MARES	FOALS
1881	4,000	2,000	2,800	1,000
1954	8,500	4,300	17,000	9,000
1989	18,000	11,000	88,000	49,000

Sparkman offered additional figures. By 1989, there were over 250,000 mares in production and 130,000 foals in some 30 racing countries. Considering there were several crops in training, the Thoroughbred population on Planet Earth in 1989 may be estimated between 750,000 and one million.

"During the long ago days of the creation of the Thoroughbred," explains Sparkman, "the number of individuals in the breed was so small that close inbreeding was inevitable and very frequent, a logistical fact that had enormously significant genetic implications. While England remained the sole center of production, the Thoroughbred was a unified breed.

"But," adds Sparkman, "as the breed became transplanted throughout the world, it led to a splintering of the breed into somewhat distinct, identifiable - although certainly interrelated - segments."

As a result, each country developed its own type, "uniquely suited to indigenous racing conditions." "Actually, until the 1970's," continues Sparkman, "the French, English and American Thoroughbreds possessed identifiably different pedigrees. Sir Ivor, Nijinsky II, Mill Reef, Lyphard, et al, changed that in short order."

Thus, the "international outcross" became a fact of life in the world of the Thoroughbred. Sparkman contends that "a new international elite has developed - indeed, this international elite may be developing into something approaching a distinct breed."

Expanding, Sparkman says: "In the early days of the breed, when numbers were so small, it was conceivable in terms of quality that any member of the breed could be bred to another. In the modern era, it is beyond the realm of possibility that the theoretical lowest ranked mare in the breed would be bred to the highest ranked stallion. Breeding the best to the best now excludes hundreds of thousands of horses from the top ranks of the breed."

The advent of the mega-rich Arab owners in the 1980's has doubtless added to the isolation of the elite of the breed. Arab participation helped drive stud fees for elite stallions to new heights, further decreasing the likelihood of lesser mares crossing with elite stallions. The huge scale of the Arab operations also serves to concentrate elite mares and stallions in fewer hands, further accentuating elitism in the breed.

As Sparkman views it, this will increase regionalism in America and other countries, where, in many instances, it will be necessary to use either "well-bred non-

entities, or fair-to-good horses with moderate to poor pedigrees." At the same time, many of the mares taken out of production in Kentucky and other important breeding areas, "will end up producing foals in regional markets, such as the various breeding states in the U.S.A. or in the various breeding countries throughout the globe."

"The overall result,," as Sparkman sees it, "is that the elite of the breed will become even more isolated from the vast majority of Thoroughbreds...Members of the Thoroughbred elite in America and Europe have become more and more alike in aptitude, type, and pedigree in the last two decades."

But, to my way of thinking, this historical development does not diminish the efficacy of intelligent inbreeding in whatever form it is used. Indeed, because of this development, it would seem that its utilization should be heightened or increased. There is a greater need now to "perpetuate" the characteristics of the most prepotent and influential multiple antecedents in the "ruling elite."

Please note the use of the word "perpetuate". Many years ago, John A. Bell III, breeder of the closely inbred American two-year-old Champion of 1950, Battlefield, and still master of the highly successful Jonabell Farm in Lexington, KY, expressed this definition of inbreeding: "Inbreeding is Perpetuation of the characteristics of the multiple ancestor, not an intensification as some misconstrue the term 'doubling up' to mean."

It was also around 1950 the noted American economist and devoted researcher of pedigrees David Novick said: "It is only the intangible of temperament, or the nervous system of the horse - certainly a factor in Thoroughbred competition - which makes inbreeding in Thoroughbreds an inexact science. Inbreeding has attained its goal, almost without exception, in other fields when it has been given a fair chance."

One of the most dynamic articles on inbreeding appeared in the September, 1962, issue of the late and lamented *The British Racehorse*. This inbreeding article was written by Dr. E. Fitch Daglish and it was at once the most absorbing and revealing article that I've had the pleasure of reading. Already a firm believer in intelligent inbreeding, this scholarly treatise converted me forever.

Dr. Daglish explained: "Perhaps the commonest fallacy is that inbreeding must create undesirable characteristics of some kind, such as infertility, loss of vigor, over-excitabili-

Continued on page 8

and their half sister, St. Victorine, the tailfemale ancestress of Star Kingdom. Canterbury Pilgrim was produced by Pilgrimage, heroine of both the 1000 and 2000 Guineas.

Pilgrimage, who bred a Derby winner in Jeddah, also produced Canterbury Pilgrim's half brother, Loved One. Loved One appears in the distaff pedigree of Star Kingdom's sire, Stardust, and he also appears in the family tree of Chaucer's magnificent racing and producing daughter, Selene, dam of Hyperion, the sire of Stardust. Therefore, Loved One adds two more crosses of Pilgrimage, the dam of Canterbury Pilgrim who appears three times.

This concentration of inbreeding to Pilgrimage, a superior racemare and one of the Stud Book's finest foundation mares, through several different individuals, is encouraging evidence that this may be why Star Kingdom turned out to be what he was and not what he was expected to be.

If Star Kingdom stands out as the most dominant influence in Australasia's modern-day past, I believe it would be accurate to say that Sir Tristram deserves that ranking among present-day sires in Australasian racing and breeding. What he has accomplished since his first crop came to the races in 1978/79 is a litary of record-breaking statistics. In the "Australian Bloodhorse Breeders' Yearbook 1991". I contributed an article on Sir Tristram and why I thought he had achieved such phenomenal success. I felt then that much of it was due to his being inbred to two renowned female families, each hosting considerable "sire blood", and my research and observations since then have only strengthened my belief.

Sir Tristram's sire, Sir Ivor, achieved his *chef-de-race* status essentially as a "filly sire." Non-Stakes winner Sir Tristram won only 2 of 19 starts. One of these 19 starts was in the 1974 Kentucky Derby in which he finished 11th of 23 in the race's centennial running. Obviously, Sir Tristram did not earn his opportunity at stud because of his race record. But what about his Pedigree?

Sir Tristram is inbred to two of the most influential matrons in the Stud Book - Selene, a daughter of solid *chef-de-race* Chaucer, foaled in 1919, and Lavendula, a foal of 1930 by Intermediate chef-de-race

Sir Tristram has Selene, 5x4, as the dam of Pharamond II, sire of Athenia, the 2nd dam of Sir Ivor, and as the dam of All Moonshine, the 3rd dam of Sir Tristram. Lavendula appears 5x5 in Sir Tristram's family tree as the dam of Source Sucree, the dam of Brilliant/Intermediate chef-derace Turn-to, the sire of Sir Gaylord (the sire of Sir Ivor), and as the dam of Perfume, the dam of Brilliant chef My Babu, the sire of All My Eye (the dam of Isolt who the dam of Sir Tristram).

It will be recalled that the superior racemare Selene, in addition to Pharamond II, also produced that latter's full brother, Sickle, whose male line through such descendants as Alydar, Mr. Prospector, Affirmed, Majestic Light, and Fappiano, is rivaling that of Northern Dancer. Of course Selene also produced the immortal Hyperion, as well as Hunter's Moon, a notable classic sire in South America.

A most fascinating aspect of all this is that Selene herself was a product of inbreeding to a renowned female family through different individuals. She had the dual Classic winner, Pilgrimage, 3x4 in her pedigree. Pilgrimage, as noted, produced the English Oaks heroine Canterbury Pilgrim and Canterbury Pilgrim in turn, produced Chaucer, the sire of Selene. Pilgrimage, also as noted, produced Loved One, the sire of Gondolette (the dam of Serenissima who is the dam of Selene). Indeed, Lord Derby acquired

Gondolette for the sole purpose of using her to obtain a 'double dose' of Pilgrimage, believing something good could come from that.

In addition to producing Selene's dam Serenissima, Gondolette produced Tranquil, best in the 1000 Guineas and St. Leger, and Sansovino, who captured the Epsom Derby. Thus, Selene, Tranquil, and Sansovino were all inbred to Pilgrimage.

So, Lord Derby's deliberate effort to inbreed to this superior distaff family early in this century is enduring and progressing extensively as we are about to enter the next century.

Lavendula, in addition to producing Source Sucree (the dam of Turn-to), and Perfume (the dam of My Babu) also produced Ambiorix, sire of over 50 SWs and America's leading sire of 1961.

When one considers the 'sire blood' attributable to Selene and Lavendula and then realizes that Sir Tristram is inbred to these two incredibly influential foundation matrons, it is not too difficult to speculate that this may be the reason why Sir Tristram, for all his shortcomings as a racehorse, is by far, Sir Ivor's most successful son at stud. The pedigree of Star Kingdom and Sir Tristram actually have a great deal in common. (Continued next month)



Turn-To Sir Gaylord Somethingroyal Sir Ivor Mr. Trouble Attica Athenia

SIR TRISTRAM **PRINCEQUILLO**

Round Table

Knight's Daughter

My Babu

All My Eye

All Moonshine

Royal Charger (Nearco-Sun Princess) Source Sucree (Admiral Drake-LAVENDULA) PRINCEQUILLO (Prince Rose-Cosquilla) Imperatrice (Caruso-Cinquepace) Mahmoud (Blenheim II-Mah Mahal) Motto (Sir Gallahad III-Maxima) Pharamond II (Phalaris-SELENE) Salaminia (Man O' War-Alcibiades) Prince Rose (Rose Prince-Indolence)

Cosquilla (Papyrus-Quick Thought) Sir Cosmo (The Boss-Ayn Hali)

Feola (Friar Marcus-Aloe)

Djebel (Tourbillon-Loika)

Perfume II (Badruddin-LAVENDULA) Bobsleigh (Gainsborough-Toboggan)

SELENE (Chaucer-Serenissima)

INBREEDING RATIO: 25%

Isolt

LAVENDULA 5x5 SELENE 5x5 MUMTAZ MAHAL 6x6x6 PRINCEQUILLO 4x3 PHAROS 6x6x6



by Leon Rasmussen

INBREEDING
TO SUPERIOR
TO SUPERIOR
Superior Female Families
FEMALE
Through Different Individuals" is a method of inbreeding championed by
THROUGH
Leon Rasmussen for the better part of his
DIFFERENT journalistic life.
When a breeder inbreeds to a

Part III

stallion, the inbreeding created to that stallion's dam is NOT considered inbreeding to a superior female family. In order to in-

breed on this method, the inbreeding must be delivered through different individuals. It must be through full siblings or half-siblings. Editor

Most breeding publications print duplicated names in a pedigree in boldface type. However, quite often this is not enough to give a true portrait of the horse in question or the amount of inbreeding to be found in the pedigree. There is "unseen" and, in a great many cases, extremely important inbreeding.

For example, I recently ran across a four-generation pedigree without any boldface type, and yet within this four generation pedigree was Nasrullah, his full sister Rivaz, and another full sister, Malindi, and his three-parts brother Royal Charger.

This was hardly an outcrossed Thoroughbred. Yet, looking quickly at the pedigree, it could be taken as one. Like the storied Italian owner and breeder, Federico Tesio, one must try and educate oneself to know the names in a pedigree and to understand what each one, if possible, stands for.

This type of inbreeding can have a dramatic effect on "sire power". There are no better examples than that of Englishbred Star Kingdom and American-bred Sir Tristram. Neither of them were given any chance at stud in their respective countries, instead they were "cast-off" to Australia.

One of my favorite stories in racing and breeding, especially as it has so dramatically affected racing in Australasia, is that of Star Kingdom, a chestnut son of Stardust (by Hyperion) out of Impromptu, by Concerto (a decent sprinter but rather obscure sire).

If I may quote from an article of mine that appeared in the "Australian Bloodstock Breeders' Yearbook - 1990": "Foaled in 1946, Star Kingdom, who raced in England under the name of Star King, was a clever little guy who won five of his six starts at two and was only beaten a very questionable short head by Abernant in the Sandown National Breeders' Produce Stakes at 5 furlongs. Abernant, also a grandson of Hyperion, was acclaimed Champion of his age and given top-

weight of 133 pounds on the Free Handicap, two higher than Star Kingdom.

"While Star Kingdom's sire, Stardust, did moderately well at stud, Star Kingdom was the first important winner from his distaff family in three generations.

"At three, Star Kingdom did not exhibit the same brilliance as he did as a 2YO. Because of this his price as a stallion prospect became more affordable and he was acquired by an Australian group. Because he was a hard sell due of his size, the group had to supply him with their own mares. One rival stud master exclaimed: "I don't want to breed ponies and a journalist complained that breeding to him would be a 'setback to racing by furthering a breed of speedy squibs'."

The rest of the story, of course, is familiar history. On the occasion of his death at age 21 in 1967, no one could contradict one turf writer's glowing eulogy - "probably the greatest stallion influence on immediate impact, in Australian Turf history."

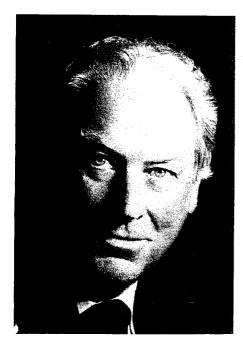
Considering his startling and enduring genetic contributions, Star Kingdom's success, both on the track and at stud, was difficult to understand; that is, unless one realizes that he has three crosses of one of the most honored female families in his pedigree.

Star Kingdom carried three crosses of English Oaks-winning Canterbury Pilgrim through the latter's *chef-de-race* sons, the half-brothers Chaucer and Swynford,

Bayardo (Bay Ronald-Galicia) Gainsborough Rosedrop (St. Frusquin-Rosalind) Hyperion Chaucer (St. Simon-CANTERBURY PILGRIM) Selene Serenissima (Minoru-Gondolette) Stardusi Cicero (Cyllene-Gas) Friar Marcus Prim Nun (Persimmon-Nonsuch) Sister Stella SUNSTAR (Sunridge-Doris) Etoile Princesse de Galles (Gallinule-Ecila) STAR KINGDOM Orby (Orme-Rhoda B.) Orpheus Electra (Eager-Sirenia) Concerto SUNSTAR (Sunridge-Doris) Constellation Stop Her (Carbine-Catcher) Impromptu Tracery (Rock Sand-Topiary) Papyrus Miss Matty (Marcovil-Simonath) Thoughtless Swynford (John O'Gaunt-CANTERBURY PILGRIM)) Virgin's Folly Widow Bird (White Eagle-CANTERBURY PILGRIM)

INBREEDING RATIO: 14%

CANTERBURY PILGRIM 5x5x5 SUNSTAR 4x4 LOVED ONE 6x6x6 GALLINULE 5x6x6 ST. SIMON 5x6x6x6



by Leon Rasmussen

INBREEDING There are a
TO SUPERIOR wide range of superb examFEMALE ples of successful runners and producers who are inbred to suTHROUGH perior female families through differDIFFERENT ent individuals on both sides of the equator.

Part IV Australia's recently designated Brilliant chef-de-race, Matrice, is inbred 3x3 to full brother/sister, Fairway and

Fair Isle. He also has crosses of the fabulous Gondolette 4x5. To make his pedigree all the more fascinating, Lord Derby's superior racemare and producer, the legendary Pilgrimage, appears eight times within Matrice's first seven generations. Not only that, Matrice's 2nd dam, La Jaconde, was by the celebrated Australian-bred Heroic, who, in turn was inbred to the illustrious foundation matron, Illuminata 4x3. Illuminata bred two Classic winners, including the expansive influence Chelandry.

Another example is Australia's Coronation Boy, three times a Champion sire of 2YOs and once a Champion broodmare sire. He was imported by Australia mainly because he was inbred 3x3 to Mumtaz Mahal through a daughter and a son.

In 1988, Kenmare, who stood briefly in Australia, and Kampala, standing in New Zealand, ranked 1st and 4th, respectively among the leading sires in France. Kenmare was also the leading sire of 2YOs. Kenmare and Kampala were both sired by Quality *chef* Kalamoun (Zeddaan-Khairunissa, by Prince Bio). Kalamoun is also sire of the multiple Group I race winner and sire Kalaglow. Kalamoun, a foal of 1970, won the French 2000 Guineas as well as two other Group I fixtures. Considering his impact on the breed, his untimely death at age 9 was a tremendous loss to the breed.

An examination of Kalamoun's pedigree reveals Nasrullah and his Stakes winning and producing full sister, Rivaz, is 3x3 in his pedigree. Kalamoun also carries a cross of the brilliant influence Fair Trial in his 4th remove. Fair Trial (by Fairway) was produced by Lady Juror, an equally renowned half sister to Mumtaz Mahal, the dam of Mumtaz Begum, the dam of Nasrullah and Rivaz. Nasrullah is the tail-male grandsire of Zeddaan, the sire of Kalamoun, while Rivaz is the 3rd dam of Kalamoun.

Interestingly, Kalamoun's talented son Kalaglow, hero of both the King George VI & Queen Elizabeth Diamond States and Eclipse Stakes, like Kalamoun, carries a cross of Fair Trial (though his fine son Palestine) in his family tree, adding another cross of Lady Juror.

In a comprehensive article appearing last year in England's *Pacemaker and Thoroughbred Breeder*, Camilla Power analyzed 1992's leading sires of Pattern winners and examined how these sires com-

pared with their predecessors.

Ms. Power, using European-based sires, rated them by percentage of Group Winners to Racing Age Offspring and percentage of Group I race winners to Racing Age Offspring. Kalamoun was the leader in both categories.

To quote Ms. Power: "Quite outstanding in terms of Group winners from racing age offspring is the short-lived Kalamoun, who has out-performed Mill Reef by a margin of two percentage points. His ratio of almost 11.5% is phenomenal, though it will be argued that he is favoured by a small sample size of just 112 foals. Had he lived, his percentage is likely to have moved downwards. However, Kalamoun's very high figure of Group I winners from foals - 4.9% - suggests that he had the ability to sustain that level of high-quality production".

Probably the first to identify Kalamoun's phenomenal success as a sire of sires was Jack Werk, right here in Owner Breeder In Jack's excellent study that appear in the APR91 issue titled "A Comprehensive Guide to Sires of Sires", Kalamoun ranked as the No. 2 leading *sire of* sires of 1990, behind Northern Dancer and ahead of Mr. Prospector. To quote from his article, "The stallion ranked 2nd comes as quite a surprise. Twelve percent (12%) of all of Kalamoun's sons sired SWs in 1990. Kalamoun is by Zeddaan who is by Grey Sovereign. Grey Sovereign is represented in North America through Caro. Grey Sovereign has been a very dominant sire line in Australia/ New Zealand through his son Sovereign Path. In Europe, Grey Sovereign has been dominant Continued on page 2

PHALARIS (Polymelius-Bromus) SCAPA FLOW (Chaucer-Anchora)

> Stefan The Great (The Tetrarch-Perfect Peach) Celiba (Bachelor's Double-Santa Maura)

SWYNFORD (John O'Gaunt-Canterbury Pilgrim)

Serenissima 1 (Minoru-GONDOLETTE)

Nimbus (Elf II-Nephte)
Yveline (Gardefeu-Photime)

SWYNFORD (John O'Gaunt-Canterbury Pilgrim)

GONDOLETTE (Loved One-Dongola)

PHALARIS (Polymelius-Bromus)

SCAPA FLOW (Chaucer-Anchora)

Valais (Cicero-Lily Of The Valley)

Chersonese (Cylgad-Chelandry)

Linacre (Wolf's Crag)

Bronze Cross (Bronzino-Criss Cross)

Blue Peter
Fancy Free
Masthead
Schiavoni
Schiaparelli
Aileen
MATRICE
1951 colt

colt Sansovino St. Magnus

D . . .

La Patrice

Heroic

La Joconde

Bronacren

Fair Isle

Fairway

INBREEDING RATIO: 35%

FAIRWAY/FAIR ISLE 3x3 (Brother/Sister)
PHALARIS 4x4
SCAPA FLOW 4x4
GONDOLETTE 5x4
SWYNFORD 4x4

EONSPEAKS



by Leon Rasmussen

INBREEDING Northern Dan-TO SUPERIOR cer's female family, princi-FEMALE pally through his 2nd FAMILIES dam, Almahmoud (by Mahmoud), has proven a potent force when involved in inbreeding. Although the examples are far

Part V

COSMAH/ **NATALMA** AND **OTHER** SISTER **ACTS**

too numerous to set down here, there are some which demand a special mention. L'Emigrant (by The Minstrel) captured the French 2000 Guineas and was a co-Champion miler in that country. L'Emigrant carries Almahmoud's daughters, the half-sisters Natalma (dam of Northern Dancer, the sire of The Minstrel), and Cosmah

(a SW and Stakes producer) 3x3 in his pedigree. Suprina, the daughter of Vaguely Noble who produced L'Emigrant, also produced Salpinx, a Group SW and classic-placed. Salpinx is even more closely inbred than L'Emigrant. Suprina conceived Salpinx to the cover of Northern Dancer himself. Thus, she is a three-quarter sister to L'Emigrant, with half sisters Natalma and Cosmah 2x3 in her pedigree. Salpinx is dam of the top-class English SW from a few seasons ago, Zalzal, by Roberto (himself uniquely inbred).

Then there was the late Stephan's Odvssev and his full sister Lotka. Lotka was the winner of America's Grade I Acom Stakes, while Stephan's Odyssey won two Grade I fixtures and placed 2nd in the Kentucky 'Derby and Belmont. Like L'Emigrant, they were sired by a son of Northern Dancer (in this case Danzig) and produced by a mare whose 2nd dam was Cosmah. So, L'Emigrant, Stephen's Odyssey, and Lotka, were all inbred 3x3 to half sisters Natalma and Cosmah, and in exactly the same positions!

Coup de Folie was recognized as Owner Breeder's 1992 "Broodmare of the Year" – and a most worthy recipient was she. Coup de Folie was sired by Halo, twice a Champion sire in the U.S. Halo, in turn, was produced by Cosmah. Coup de Folie was produced by Raise the Standard, a half sister to Northern Dancer. Northern Dancer, of course, was produced by Cosmah's half sister, Natalma. Thus, Cosmah and Natalma appear 2x2 in Coup de Folie's pedigree along with the dam of both, the remarkable Almahmoud appearing

This dramatic inbreeding did not compromise Coup de Folie's racing ability, as she was a Group III SW in France as well as being classic-placed. Did this dramatic inbreeding enhance her ability to produce superior runners? You be the judge. To date, Coup de Folie has produced:

- Machiavellian (by Mr. Prospector), Champion European 2-year-old of 1989.
- Exit To Nowhere (by Irish River), a 1992 Group I SW in France.
- 3) Hydro Calido (by Nureyev), a Group II SW and Classic-placed in 1992.
- 4) Coup de Genie (by Mr. Prospector), winner of two Group I races as a 2YO in 1993.

Incredibly, Machiavellian, Exit to Nowhere, Hydro Calido, and Coup de Genie are among Coup de Folie's first five foals.

Irish River (sire of Exit to Nowhere) and Nureyev (sire of Hydro Calido) add even more fascinating inbreeding to two of these pedigrees. Irish Star, the dam of Irish River is inbred to the glorious distaff family of Sweet Lavender, while Black Brook, the 2nd dam of Irish Star, was inbred 3x3 to Plucky Liege, dam of four chefs-de-race (Sir Gallahad III, Bull Dog, Admiral Drake, and Bois Roussel). Coup de Folie, for her part, adds an additional cross of the Sweet Lavender family to which Irish Star is already inbred.

Therefore. Exit to Nowhere is the product of a sire and a dam who are each inbred to exceptional female families through different individuals.

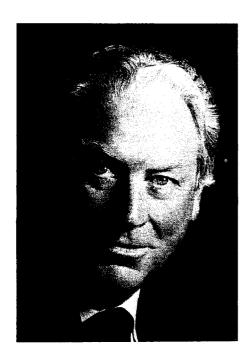
The three crosses of a famous female family represented in Exit to Nowhere's pedigree are matched in Hydro Calido's pedigree. As noted, Coup de Folie is inbred 3x3 to Almahmoud through the half sisters Cosmah and Natalma. Hydro Calido's sire, Nureyev, is by Northern Dancer, whose dam was Natalma. Therefore, the brilliant matron Almahmoud appears 4x4x4 in Hydro Calido's pedigree.

Yet another case of the Natalma/Cosmah connection is 1992 Preakness winner, Pine Bluff, who carries Natalma and Cosmah 3x3 in his pedigree.

Earlier mention of Danzig, America's Champion sire for each of the last three years, brings to mind his son, Danehill, topweight on the International Classifications in 1989 for 3YOs from 5 to 6 and 1/2 furlongs and among the leading freshman sires in Europe for 1993. Once again we find a powerful inbreeding pattern. Danehill is inbred 3x3 to Natalma. In the 2nd generation of Danehill's pedigree are Northern Dancer and his half sister Spring Adieu (by Buckpasser). Danehill is, therefore, inbred 2x2 to a half brother and sister.

In 1971, another daughter of Buckpasser, Numbered Account, was America's Champion 2-year-old filly. Buckpasser who achieved Classic chef-de-race status primarily through his daughters, traces to the storied La Troienne in tail-female while Numbered Account, herself traces to La Troienne in tail-female through her dam, Intriguing (by Swaps). Numbered Account has the half sisters, Businesslike and Baby League 3x4 in her pedigree (both tracing to La Troienne).

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by Leon Rasmussen

INBREEDING Domino remains one of the most cherFEMALE ished names in the history of American racing and breeding. He was THROUGH

Part VI CONCLUSION his gravestone reads:
"Here lies the fleetest
runner the American
turf has ever known,
and one of the gamest
and most generous of
horses."

What the gravestone does not mention is the incredible fact that his stud career ended at age six, just a few months after his first foals arrived.

Domino left only 20 foals. Eight of these won Stakes. Of his nine sons, four were geldings and one died. Against such odds, the blood of the "Black Whirlwind" was astonishingly prominent in the best runners and producers in the first half of this century, primarily through his Belmont Stakes-winning son Commando, sire himself, of two Belmont winners and

such sires as Peter Pan, Superman, Celt, the unbeaten Colin, and the fascinatingly inbred Ultimus.

The close inbreeding to a notable female family through different individuals which has characterized the pedigrees featured in this series, is also found in the family tree of Domino (Himyar-Mannie Gray, by Enquirer).

Mannie Gray had a most intriguingly inbred pedigree. She had Lexington, the all-time lead-

ing American sire with 16 championships, 3x3 in her pedigree. More remarkable, however, was that her dam, Lizzie G., was by War Dance out of a mare by Lecompte. War Dance was by Lexington out of Reel (by Glencoe). Lecompte was by Lexington's sire Boston, and out of Reel.

Therefore, Lizzie G., the 2nd dam of Domino, had the three-parts brothers, War Dance and Lecompte, 1x2 in her pedigree. Adding even more to this amazing kinship is Judith, the 5th dam of Domino. By Glencoe, Judith was a three-quarters sister to Reel (the dam of both War Dance and

Lecompte). In other words, Lizzie G., the 2nd dam of Domino, had her three-quarter sister, Judith 2x3 in her pedigree.

Domino also brought in another cross of Lexington through his sire, Himyar, making him inbred 3x4x4 to Lexington. Domino had 4 crosses of Boston, sire of Lexington, within his first 5 generations.

So, that is the amazing inbred story of the superior racehorse and superior sire who did more with fewer opportunities

Orlando (Touchstone-Vulture) Eclipse Gaze (Bay Middleton-Flycatcher) Alarm Stockwell (The Barron-Pocahontas) Maud Countess Of Albemarle (Lanercost-Sister To Hornsea) Himyai BOSTON (Timoleon-Ball's Florizel Mare) LEXINGTON Alice Carneal (Sarpendon-Rowena) Hira Ambassador (Plenipotentiary-Jenny Mills) Hegira Flight (Leviathan-Charlotte Hamilton) DOMINO colt 1891 Faugh-A-Ballagh (Sir Hercules-Guiccioli) Learnington Mare by Pantaloon (Pantaloon-Daphne) Enquire LEXINGTON (BOSTON-Alice Carneal) Lida Lize (American Eclipse-Gabriella) Mannie Grav LEXINGTON (BOSTON-Alice Carneal) War Dance REEL (Glencoe-Gallopade) Lizzie G. Lecompte (BOSTON-REEL) Lecompte Mare Edith (Sovereign-Judith) INBREEDING RATIO: 29%

LEXINGTON 3x4x4 BOSTON 4x5x5x5 REEL 4x5 (Supported entirely by Domino's dam)

than any Thoroughbred in history.

Incidentally, Commando, Domino's most influential son, brought more Lexington and Glencoe blood into the picture through his dam.

This extremely close female inbreeding in Domino's pedigree is quite similar to that of Ireland's Group I Stakes-winning Champion 2-year-old of 1992, Fatherland. This late son of Sadler's Wells had the full sisters, Lisadell and Special (both by Forli out of Thong) 1x3 in his pedigree. So what worked back then seems to be working now.

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Prince Rose (Rose Prince-Indolence) Princequillo Cosquilla (Papyrus-Quick Thought) Round Table Sir Cosmo (The Boss-Ayn Hali) Knight's Daughte Feola (Friar Marcus-Aloe) Poker Nearco (Pharos-Nogara) Nasrullah Mumtaz Begum (BLENHEIM II-Mumtaz Muhal) Glamour WAR ADMIRAL (Man O' War-Brushup) STRIKING BABY LEAGUE (Bubbling Over-La Troienne) MY CHARMER 1969 filly BLENHEIM II (Blandford-Malva) Jet Pilot Black Wave (Sir Gallahad III-Black Curl) Jet Action WAR ADMIRAL (Man O' War-Brushup) BUSHER BABY LEAGUE (Bubbling Over-La Troienne) Fair Charmer Good Goods (Menow-Gaga) Alsab Winds Chant (WAR ADMIRAL-Businesslike) Fair Charmer Equipoise (Pennant-Swinging) Crepe Myrtle Myrtlewood (Blue Larkspur-Frizeur)

INBREEDING RATIO: 25%

STRIKING/BUSHER 3x3 (Full Sisters) BLENHEIM II 5x4