John Hunter - 70 years of daffodil hybridising

John's Great Grandfather, George Cook, arrived in New Zealand as a 10 year old in 1842 and grew up in Riwaka. In the mid 1880's he grew daffodil bulbs on the family farm for one of New Zealand's first daffodil nurserymen Henry Budden. From photos John has identified probable varieties he grew which were barrii conspicuus, Emperor and Empress. It was from these beginnings that John's family became interested in daffodils. In the early 1930's John's mother exhibited at the Nelson Horticultural Society's shows in the floral art section and sometimes used daffodils from plantings given to her by her brother R.P. Cook of Riwaka. In 1945 John asked about a row of daffodils growing along the fenceline of his parent's garden that her brother had given her. His mother suggested he pick one of the flowers to exhibit in the show. He was 9 years old at the time. He chose the flower Bernardino 2W-YYO (registered 1907 by P.J.Worsley). It was an attractive flower with an apricot coloured corona. It was entered in a class for one incomparabilis (now division 2), white perianth, coloured corona. He entered in the open section of the show and took second place earning one shilling prize money but it cost sixpence to enter. According to the Prize Money book for the 1945 Nelson Horticultural Spring Show that John still has in his possession, there were 35 exhibitors showing daffodils. If only we still had these numbers today.

Other daffodils he remembers In his parent's garden were a large yellow trumpet. Owen Bray (Sharp, NZ), Kantara, a white trumpet of Rev. G.H. Engleheart and Warcloud, 1W-O raised by Sir Heaton Rhodes who was the N.Z Daffodil Society's President for many years. Warcloud was probably the world's first 1W-O trumpet although it had a muddy perianth showing a yellow tinge. Also there were Lady Superior and Mountain Pride two white and red short cups raised by Mrs R.O. (Sarah) Backhouse. John said he gained Champion Bloom of the Nelson Show in 1954 with Royalist (N.Y.Lower) and White House (Brodie of Brodie) the following year.

John's uncle gave him a small collection of his own to grow. Some of these varieties were Mogul, Carbineer, Porthilly, Cornish Fire, Beersheba and White Nile. He also showed John how to pollinate the daffodils and John made 11 crosses on the 26th September 1949 and has been making crosses every year since then.

This will be John's 70th year of continuous hybridising which is a formidable achievement.

In 1955 John went to Hobsonville Air Force Base in Auckland for compulsory military training and whilst out on a route march he noticed a large field of daffodils only a short distance from the Air Base. The following Sunday afternoon he decided to investigate the find. After jumping over the fence to take a closer look he was soon confronted by the owner who turned out to be Brian Parr's father. Needless to say a conversation about daffodils took place and he spent the afternoon with him. While there he noticed a row of about 6ft of the yellow trumpet Gold Digger (Richardson) was turning on a marvellous display. Three daffodil varieties were ordered for delivery the following summer. That year he planted open pollinated seeds only.

My conversation with John and Marie took place on a very hot February day when I interrupted them from sorting bulbs in their garage. It looked very orderly with bulbs in labelled bags or spread on trays, Marie knew where every variety was either by consulting her extensive notes or just by knowing the layout of all the trays on the benches or on the floor.

I attempted to steer John towards talking about all the major aspects of his extensive hybridising programme but I know what follows is just a snippet of what he has achieved. So in no particular order we started with the pinks.

"After the Second World War the Australian breeders, Jacksons, Radcliffes and others focused their efforts on pink cups as there was a class at the Australian shows for the best pink. This is why there were so many excellent pink flowers raised by the Australian breeders."

John said he has used daffodils for hybridising from four countries combining the best of them to form his strain of pinks. These produced in their progeny, broad ovate perianth segments, good stems, form and pink colour. The earlier English cultivars having pink colouration were mainly bred from Engleheart's White Sentinel. These had good form, the colouring more salmon pink but the constitution was sometimes weak. In later years Pol Voulin was used. This cultivar proved to be, and still is, one of the best for breeding pink daffodils. The American pinks had tall stems and good colour but sometimes lacked refinement. Mitsch's Precedent proved the most useful of these. The Australian pinks generally had excellent colour and form but some of them lacked stem length here in New Zealand. John has used Vahu, Verran and Obsession extensively in his breeding programme. The 2W-WYY Dutch variety Daisy Schaiffer was brought into the pink breeding line to add vigour. He bred his first pink trumpet from Karanja crossed with P.D. William's Trousseau.

John considers his best pinks to be division 2 Tranquil Image and the trumpet Pink Cosmos because they do well with all growers and are good breeders. "Polar Sky has done extremely well, perfect perianth, sheer perfection with a good pink rim. It has twice been Champion Bloom at a New Zealand National Show. Both Polar Sky and Tranquil Image have First Class Certificates gained in the days when 18 flowers was the requirement."

"We should be concentrating on the red pinks as they are becoming very popular with the public. Grant Mitsch and Murray Evans were the first to produce red pinks in America with Cool Flame and Quasar. The seedlings from them have a fault that is hard to eliminate. The crowns from their progeny are inclined to have ragged edges. I have crossed them back onto the normal pinks but the percentage of red pink cups produced is very low but some improvements are taking place. The only red/pink of mine registered to date is Crisis Point bred from 51/97B x Luvit. 51/97 is {Decoy x [Recital x Quasar]} crossed with Precedent x Rose Royale. Graham Phillips' Luvit has marvellous colour but has proved, for me, to be a poor breeder. Over one thousand Luvit seedlings were grown. Only one standard size cultivar was retained and that was Crisis Point."

Trumpet daffodils

"Two of my first successful yellow trumpets from the late 1950's were Moon River and Moon Dream. Moon River was a Kingscourt seedling, a large flower with good substance, colour and form. On mentioning the cross of Moon Dream in a letter to Guy L. Wilson he wrote back to me on the 11th July 1960 saying 'I am interested to hear of your batch of seedlings from Royalist x Ulster Prince which appear to be so far ahead of the rest. You may well get some really good things out of this batch, as Royalist is a very good parent for quality, while Ulster Prince is one of the tallest and strongest, most vigorous yellow trumpets that I grow'. I still have this letter which I value highly amongst all my daffodil correspondence. One of my more recent yellow trumpets that appears to be doing very well is Braveheart, bred from ([Camelot x Director] x Gold Tan) crossed with Sulphur Monarch. The pollen parent Sulphur Monarch appears to grow well for everyone and is widely exhibited. Arvid, a bi-colour trumpet from Lapford self pollinated is a very large flower and has huge leaf growth. I have crossed it with Queens Guard both ways which has given good bi-colour and white trumpets. Queens Guard bred by Brian Duncan, is easily the best daffodil that I have had from him. It produces consistent exhibition blooms, makes big round bulbs and has good leaf growth. Another reasonably new registration of mine is Tasman Sea, a strongly contrasted white and yellow trumpet bred from (My Love x Empress of Ireland) the pollen parent being (Compute x Pops Legacy)."

All whites

"I used Empress of Ireland and Glendermott two of Guy L. Wilson's best white daffodils. There is not much around that is better today. I also used Arthur Davey's Kotuku which is bred from Guy Wilson's Kanchenjunga (one of the largest white trumpets I ever grew) crossed with Carnlough. Kanchenjunga was bred from (G.H. Engleheart's White Knight x P.D.William's Conqueror) x Brodie of Brodie's Askelon. The late Guy Wilson wrote some years ago that only three seeds resulted from this cross to produce Kanchenjunga. He also mentioned that to have White Knight in a pedigree was a high water mark."

"I consider Silver Monarch to be one of my best all white daffodils to date. It has Askelon in its pedigree five times. It is immensely vigorous with strong upright leaf growth. It has been best Division two at our NZ National shows and also the best overall white daffodil. It appears to be growing very well in Northern Ireland." Cosmic Ice 1W-W, was the Champion Bloom of the 2017 North Island National Show. It is bred from Polar Mist x (White Glen x Medicii). Polar Mist of mine has also been the Premier White Trumpet at National Show level. It was from Panache x (Glendermott x Kotuku)."

John has registered nine 1W-Ws and fifteen division two all whites to date. Of these twelve feature the cross Glendermott x Kotuku either as the pollen parent or as the grand pollen parent. "I consider John Lea's Canisp as his best all white and it is a marvellous breeder.

Red yellows

"All my Red and yellows started with a cross between Marksman and Narvik that I did in the early 1950's. Narvik was raised by J.L. Richardson from Carbineer x Porthilly. I registered Swordsman in 1967 and continued the line with Swordsman crossed Air Marshall to produce Excalibur in 1982 and Quickfire in 1990. Navigator, the next advance registered in 1999, was from a seedling (Air Marshal x Torridon) x (Solar Flare x Excalibur). "

"The seed pod that Marksman came from is an interesting story. Gwendolen Evelyn had been given the seed from Alexander Wilson (both are named as the hybridizer). It is said that these seeds had Firebrand in their background. She registered four of them reputedly all from the same seed pod but I am reasonably certain this is not so. There was Marksman, Rustom Pasha, Diolite and Caerleon. Rustom Pasha was one of the first sunproof red yellows. It had a dull orange crown with long oval yellow petals. Diolite was completely different with triangular petals of a beautiful clear yellow with a narrow yellow cup edged with a band of red. Marksman was quite different again and I regret I didn't do more breeding with it as it had an attribute that no one looks for these days in that the petals were gold dusted. This gold dusting turns a flower from the ordinary to the spectacular. A number of the white petalled short cups can have a silver dusting but very few of the yellow petalled daffodils are gold dusted and if I had my time over again I think I would be specialising in these gold dusted petalled flowers. The fourth flower of the series Caerleon I never grew."

"Aspire a strong substanced Y-R has been Best Bloom at one of our National Shows exhibited by John Hollever. A strong grower of good form it is bred from Jamore x (Cresalla x Loch Hope). Pacific Phoenix, bred from Pacific Fire x Culfind, is a larger flower of excellent form and substance. It has been champion Best Bloom twice at our National Shows. Its pollen parent Culfind came from my Excalibur crossed with Jacksons Kasia."

"My latest yellow reds, Pacific Hope and Pacific Flash came from Pacific Fire x Cameo Frills (Ramsay). Pacific Fire which is proving to be a great breeder, is from Solar Flare x Kasia. Solar Flare of my

raising has Carbineer as one parent. Pacific Flash on its first showing was premier 2Y-O/R at the 2017 South Island National Show. It is a daffodil of great vigour, excellent form and substance."

And what about the all white small cups? "Yes Polar Morn and Polar Convention were two of my earlier 3W-W's both from Polar Imp (Philpot) x Polar Dawn. Polar Dawn of mine had an excellent pedigree, Easter Moon x (Green Island x Personality). Ice Master, Wishmaster and Placid Sea all have Sea Dream of Jim O'More's in their pedigree as does Denise McQuarrie's Lake Ida.

Some of my best division 3's with coloured crowns would be Polar Flame-Corofin x (Polar Fire x[2b sdg x Arbar]). Polar Gift bred from Corofin x Byrne 21/90 (Calleen x Placid) and Hunterston (Sea Dream x Placid) x Cairntoul. I have also registered a very good tall stemmed, large flower 3Y-Y Moonwalker raised from two seedlings 41/97A x 75/01A that really measures division 3. Its pedigree is too complicated to include as it entails six generations of my own breeding.

The pink and yellows

"I had no pink and yellows to breed with originally. David Bell of Christchurch, New Zealand was leading the world in yellow pinks at that time. I started with Daydream and crossed it with Fintona a 2W-P of Guy Wilson's. Some yellow pinks appeared in the seedlings from this lot. On these I used the best of the Mitsch yellow pinks, American Shores and its sibling American Heritage and the best of David Bell's, Hicol and Kabonova. To date my brightest yellow pink daffodil is Insight (1Y-P) which I registered in 2016, bred from (American Heritage x Hamilton 1YO) x (Hicol x Vital). I have a number of excellent yellow pinks to be registered one of which is due to be named this year. It is bred from (Twilight Zone (Brogden) x Reg Cull 2YP) x Brazen. One unusual yellow pink trumpet, has a strong pink flush through the yellow petals. This cultivar has good form and size. Its pedigree is too complicated to record here, about seven generations of my breeding. Some of the varieties used behind this pink flushed flower are American Heritage, Illusion, Kabonova, Rich Reward, Vascule, Hicol and Vital. The petal colour resembles two daffodils I grew many years ago, Rouge and Nanking."

"I have two particularly good Reverse bi-colour daffodils. Mount Campbell 1YYW-WY from (Lighthouse Reef x Cosmic Dream) x ([Rich Reward x Special Offer] x Trumpet Warrior), a very bright contrasted reverse. 2YW-W Luminosity from (Symphonette x Special Offer) x Trumpet Warrior. This cultivar is a large well formed flower. It has been twice Reserve Champion and been premier on many occasions at our National Daffodil Shows."

"I have three very good yellow pink doubles, all unregistered at present, bred from Max Hamilton's Baldock. 80/98A and 80/98H Baldock x American Heritage, and 35/01C from (Baldock x Kabonova) x Brazen."

What is the most standout flower you have raised? "The hardest to breed are the doubles to get something consistently symmetrical. The cross Tranquil Image x Cosmic Dawn (4W-WYR) has produced Cosmic Image (4W-YRR) and that flower has the best symmetry in a double that I have raised. Its parents I would also rate as two of the best daffodils I have ever bred."

"I initially used Cotton Candy 4W-WYP an Evans raised flower, getting nothing until I crossed it with Jim O'More's 34/76 bred from a Radcliffe seedling 20/55 x a Richardson seedling 284. That cross produced many good doubles but we only kept two. The first one I named was Cape Farewell 4W-WYR is a strong flower and is proving to be a good cut flower as well as an exhibition flower. The cut flower growers John McLennan and Graham Phillips, are very keen to get more stock of Cape Farewell. Cosmic Dawn the sister seedling has better symmetrical form and good contrast between the red pink and white and a strong stem."

Other Divisions

"I have bred a large number of triandrus that have not been distributed as these are being grown by Pennings in Holland. Some have had Premier Blooms for me at the N.Z. National Shows."

"Regarding division 6 – Flight Path is a reliable flower in this division, it has gained a First Class Certificate from the NZ National Daffodil Society, and is also proving to be a reliable parent. A new cyclamineus hybrid that first flowered last year was bred from (Emperors Waltz OP x cyclamineus species) x Flight Path and if it flowers this season as well as it did last year, I would have to rate it the best division 6 hybrid that has appeared here to date. This cultivar opens yellow and reverses with age. It appears to have every cyclamineus characteristic that one would desire."

"I have a large numbers of jonquillas still being assessed. Some that have been registered are Star Cloud and Wishing Star from a 1998 cross and Mottles (named after my old black and white cat) from a 1999 cross. The three cultivars have the same unusual pedigree (Hillstar x {[Hicol x Vital] x Obsession}) x Emerald Sea. Mottles is proving very popular. Triple Peel is bred from Limequilla x Emerald Sea. These four jonquillas all have viridiflorus genetics bred in to them through Emerald Sea. All are vigorous with good form and three to eight florets per stem."

"I have only registered one Tazetta, Emerald Monarch from Grand Monarch x Emerald Sea. It is early flowering with clusters of white petalled green cup flowers."

"The best of the few poeticus that I have registered would be Cronkite (named after the late Walter Cronkite the American News Broadcaster). It is a marvellous colour contrasting flower W-GYR. This cultivar has had many Premiers for its division at the National Shows."

"The most successful division 11 flower of mine so far would be Gold Lake. It has had at least fifteen National Premiers for its type. I have two new very brightly coloured and well formed 11YP's to name this year. How they were bred is somewhat unusual. At the Saturday night dinner for the 2008 National Show in Lower Hutt there was a vase of daffodils on each table. In the vase in front of me was the brightest yellow pink split that I had ever seen. On enquiring amongst the members of the daffodil fraternity, no one seemed to know where they had come from. I snapped the head off the flower to take home for pollen to use on some of my very best 2Y-P seedlings. The breeding of the two to be named - (American Shores x Brazen) x Hutt YP split and (Baldock x Kabonova) x Brazen crossed with the Hutt split."

"My most recognised achievement is with autumn/winter daffodils that I have bred using viridiflorus. After reading Jefferson Brown's Book 'The Daffodil' (1951), I was intrigued about a summary of (Appendix A), Dr. Fernandes's of the University of Coimbra, Portugal. In it he stated that viridiflorus had at some distant time in the past doubled its chromosomes from 14 to 28. This made me think if I could cross viridiflorus into some of the jonqillas it should lead to fertility in this group as there were only one or two known to be fertile at that time. In 1988 I was lucky enough to obtain a few viridiflorus bulbs from the late Robin Brown. When they flowered in the Autumn I froze the pollen to use in the spring of that year. I used Sea Dream as a seed parent, a broad white perianth flower, to counteract the very narrow pointed petals of viridiflorus. One of the resultant seedlings I registered as Emerald Sea, was fully fertile. Emerald Sea has been crossed back into the fertile jonquillas that I grow, such as Hillstar and Limequilla. This has now given me a continuing line of fertility in this group. During the same period of the late 1980's (unbeknown to me) Manuel Lima of California was also using viridiflorus. We were the only two at that time breeding with this species. Lima's objective was to breed green daffodils, mine was simply to get more fertility into the jonquill group. One NZ Daffodil grower wrote in an article at the time, when he knew I was using viridiflorus

for breeding, that it would be a long long road to get any worthwhile results. In fact it was the shortest way to success that I have ever had in daffodil breeding, the first and second generation seedlings using Emerald Sea have been of exhibition quality. Viridiflorus genetics have given some very unusual traits into the hybrids, increased flowering ability and bulb increase. Most tend to flower Autumn/mid winter. One particular hybrid each year produces two flower stems side by side (one 20inch the other 17inch) from the one single round bulb (not a single bulb with an offset) flowering about a week apart. It is the only daffodil I have had with this characteristic in all the years I have been growing daffodils. If this trait could be bred into standard daffodils it could double the number of blooms for the cut flower market. It is difficult to understand why viridiflorus has not been used by daffodil breeders in the past. It was catalogued by Miss F.W.Curry of Lismore, Ireland in 1912 for four shillings and sixpence a bulb. It could be that viridiflorus requires a warmer climate to grow properly and its primitive form may have deterred most from breeding with it. I have found virtually all the seedlings I have grown from viridiflorus crossed into Spring flowering daffodils, survive quite severe winter frosts."

John's concluding remarks

"If I had my time over again I would concentrate on breeding flowers with gold dusted petals, also on breeding an all red daffodil. I can remember years ago telling a reporter that I would see an all red daffodil in my lifetime but I fear this is not going to be so. John McLennan and I have been attempting to breed the all red daffodil for a number of years. Some progress has been made using the flowers of the late Jim O'More and Alan Gibson. A large number of crosses in this line are still to flower. My niece who visits the second hand book fairs obtains any books with reference to daffodils for me. One book she located a few years back, titled 'Chronicle of the Garden' by Mrs Francis King, an American, published in 1925has in it a very good chapter on daffodils. She mentions attending an RHS Show at Westminster stating 'none, not one, has come up to the standard of excellence of those London Shows' also stating Mr Guy L. Wilson writes of one of these shows 'Across the alley was Mrs Backhouse's sensational exhibition of flowers, for the most part arrayed in flaming colours, in one or two instances quite barbaric in effect. One could rarely see the flowers, such a crowd of admirers besiege them all the time. I think Mrs Backhouse must have a feeling for dramatic effect, and of keen appreciation of the value of climax from the way in which she unpacked these flowers. She kept quietly putting up one wonder after another, amid a crescendo of superlatives from the onlookers; thinking she had arranged all her flowers, I left her stand, but passing it again a little later, I saw in the centre three flowers which reduced me to incoherent amazement. It was Mrs Backhouse who was well on the way to producing a red daffodil. Whether one may or may not fancy the idea, this would have been a triumph in hybridizing. And I myself should like for general use, for instance, a red Barrii (division 3), with a cream-white cup, one more bright pigment for our spring palette of colour.' This show refers to an RHS exhibition that would have been about c.1919/20 as Mrs R.O. Backhouse (Sarah) died in 1921. One can see by this it is almost 100 years since red back daffodils were first shown. It is a pity that daffodil raisers worldwide have not concentrated on producing the true all red daffodil. If enthusiasts continue to breed with the flower I am certain the all red daffodil will be achievable. Some pinks now have a lilac shade. If these mauve genetics are concentrated in breeding it may be possible for the blue daffodil to appear. Anyone thinking this is unachievable has only to realise that all flowers when they first appeared early in evolution were only of one colour."

"In my 70 years of breeding I have tried to cover all divisions but it may have been better to specialise in just one or two areas."

"I believe the daffodil is still in a very early stage of evolution and there is a huge number of variations still to appear. It is this variation in the flower that makes it such an interesting subject to breed with. My advice to all interested in raising new daffodils is to study pedigrees and only use cultivars of a known successful breeding background. Also to learn about the history of how the flower evolved from the time of John Parkinson 1629 to the present day. Anyone can breed good daffodils if they follow this format."

"I have spent a large part of my life, breeding and growing daffodils, but that is not all. 35 years was spent in the family firm as a watchmaker and jeweller. In my younger days I played rugby, indoor basketball and athletics. It was table tennis where I met Marie, she used to beat me because I wasn't watching the ball; she put me off for some reason!! Marie has helped me since we were married and she knows where everything is and maintains meticulous records. I could not have achieved what I have done without her."

Appendix

John is a Life Member of the Nelson Horticultural Society (N.Z. Oldest Horticultural Society), Life Member of the Brightwater Society also the N.Z. National Daffodil Society. He has served on the Executive of the NZ National Daffodil Society. Has been awarded the N.Z. David Bell Gold Medal, the ADS Gold Medal and the RHS Peter Barr Cup for advancing the daffodil.

"It appears that Brian Parr joined the National Daffodil Society in 1954 as a junior member. Spud Brogden, Ron Abernethy and I joined in 1956. This group of four are now the longest serving members of our New Zealand Daffodil Society."

John is the Society Historian

One puzzle he has only recently solved is about one of the Society's first Vice President, A.B.Spiers (1927) who was a resident of Kumara a small West Coast gold mining town near Greymouth. Spiers was mayor of Kumara, had six race horses, owned a bus and taxi service and grew daffodils as a hobby. He presented a trophy cup to be won outright for the best trumpet in our N.Z. National show.

Editor's note: In the 75th Anniversary Annual (2001) there is a report written by W.A Grace the society's first secretary in 1927 and published in the first schedule which documents the formation of the society and in that report there is a list of trophy donors and one AB Spiers is mentioned for donating a trophy valued at 2 guineas.