

2010 sees the 50th anniversary of one of New Zealand's most intriguing definitive issues. The country has a long tradition of showcasing its flora, fauna and natural beauty through the medium of postage stamps. In particular definitive issues have been used to great effect over the years, starting with the popular 'First Pictorials' issued in 1898 and followed by the 1935 'Second Pictorials'. Both relied on the skill of the engraver and high quality recess printing in order to produce series of stamps that have, over the years, amassed a significant fan base in the philatelic world. By the 1960s the technologies available to stamp printers, such as the photogravure process, should have enabled the New Zealand Post Office to create a high quality series with high visual impact, a perfect window to advertise the country's great natural assets.

Stamps
Booklets
Coils
Missing colours
Varieties

New Zealand's 'Third Pictorials'



1072 entries were received for the public competition, including this unadopted artwork for 'Aerial Topdressing'

Public reaction to the new series was mixed. While some considered the stamps, particularly the lower values featuring plants and flowers, to be simple and visually attractive, the Post Office came in for much criticism, in particular over poor colour selection and lack of contrast in the higher values. The £1 stamp was printed in pink for no other reason, it would seem, than the fact that all New Zealand's previous £1 stamps had been pink! Despite much negative reaction, the set, which remained in place largely unaltered until the introduction of decimal currency in 1967, (and even then the designs and colours remained unchanged) proved to be a goldmine for collectors as new errors and varieties came thick and fast.

The stamps

In November 1958, the Postmaster General announced that a new set of pictorial stamps would be issued in 1960. A public competition attracted 1072 entries from 268 individuals. A selection panel was appointed and given guidance that values from 1d. to 8d. should depict native flora, the set should include subjects relating to the Maoris and that representations received from the Dairy

Board, the Timber Industry, the National Parks Board and the Tourist Department should be considered favourably.

Because of the postal rates that would be in force at the time the set was to be issued, it was deemed necessary to add a ½d. value and a 9d. value was required to meet the airmail rate for postcards to North America. A design for the ½d., consistent with the required flora theme, was prepared by artists

at Harrison and Sons Ltd, and artwork for the 9d., depicting New Zealand's national flag, was prepared by officers of the Post Office Publicity Department.

The decision was taken that all values should be produced by the photogravure process. De La Rue and Co Ltd were contracted to produce the lower value stamps (½d. to 8d.), which they printed on rotary web-fed presses perforating the sheets as the paper left the printing machine. The paper used was Wiggins Teape 50 per cent esparto paper with vertical mesh and the familiar Multiple NZ and Star watermark upright.

By comparison Harrison and Sons printed the values entrusted to them in sheet-fed presses and used a rag and sulphite paper with horizontal mesh supplied by Guard Bridge Mill. The Multiple watermark was upright on the 9d., 1s., 1s.9d., 2s., 5s. and £1 values and sideways on the other values.

The majority of the series (2d., 4d., 1s., 1s.3d., 1s.6d., 1s.9d., 2s., 2s.6d., 3s., 5s., 10s. and £1) were placed on sale on 11 July 1960 and the remaining values (½d., 1d., 3d., 6d., 8d. and 9d.) followed on 1 September 1960.

Inevitably, during the life of the issue, changes to postal rates necessitated the addition of new values with 2½d. and 5d. stamps placed on sale in November 1961 and May 1962 respectively. The airmail rate for 1st class letters to Australia and the surface letter rate to non-Commonwealth destinations rose to 7d. on 1 October 1964 yet it was not until March 1966 that a 7d. stamp was issued. This was little more than a year before decimalisation—as a result covers showing correct commercial usage of the 7d. stamp are particularly elusive.

Harrison and Sons were asked to take on the printing of all three of these additional values which they duly did using a 50:50 esparto and sulphite paper with chalk surfacing and horizontal mesh. The NZ and



The 2d., 4d., 1s., 1s.3d., 1s.6d., 1s.9d., 2s., 2s.6d., 3s., 5s., 10s. and £1 values were placed on sale on 11 July 1960. The ½d., 1d., 3d., 6d., 8d. and 9d values were released on 1 September 1960





Star watermark was sideways on the 2½d. and 5d. values and upright on the 7d. The 2½d. was initially printed on a web-fed rotary press but later printings, in common with the other two values, were printed using sheet-fed presses.

These three values, together with the 1s.3d., 1s.9d. (multicolour) and 3s. (multicolour) are known with watermark



A change in the postal rates in October 1961 necessitated the addition of 2½d. and 5d. values. A 7d. value was placed on sale in March 1966

inverted and the 2½d., 5d., 1s.3d., 1s.6d., 2s.6d., 3s. and 10s. values have been found with watermark sideways, suggesting that less attention was paid to this feature when printing using sheet-fed presses.

Reissue of the 1s.9d. and 3s.

The higher values of the series in particular had been much criticised for being printed in single colours, some even suggesting that they would have been better suited to the traditional engraved process. The 1s.9d. and 3s. values in their original monochrome colours of bistre-brown and sepia were not particularly attractive and certainly did not use the photogravure process to best advantage. One critic wrote, 'It looks as if the plane is pouring out smoke rather than

topdressing material ... the colour chosen for the stamp, khaki, would make it appear a waste of time topdressing such country as it would seem the hills have not seen any rain for several years.' [Ref 1]

A new 1s.9d. was placed on sale in November 1963 and 3s. in April 1964. Both were printed in bright colours on a chalk-surfaced paper.

The design of the 1s.9d. was unchanged whilst minor modifications were made to the image for the 3s. value. Plate numbers were not printed in the margins of the reprinted stamps as had been the case with the original issue. Although available for more than three years the original printings received little attention from collectors, perhaps because they were so drab, and consequently they can be difficult to find today—particularly in plate blocks.

The plates

Not surprisingly the lower value stamps were printed in great numbers and the printers had to use several cylinders throughout the life of the issue. Some colours appeared to give more problems than others with

six different green cylinders used in the printing of the 2d. value and seven different blue cylinders used in producing the 3d. value, giving 14 different plate number combinations. These are, in the main, still relatively easy to find. Less well known is that both printers used two cylinders with the same numbers during the initial printings of some values. Detailed study of the relevant plates has identified two green cylinders No 1 were used for the 2d. value, two black cylinders numbered 1A used for the 2½d., two dark blue cylinders numbered 1 for the 3d. and two blue cylinders numbered 1 for the 4d.. In most cases it is only study of the flaws and retouches that enables the cylinders to be distinguished, however for the 3d. value the font used for the dark blue cylinder number differs and plate blocks showing the 'small "1"' are worth searching out in dealer's stocks.

The 1s.9d. and 3s. values, with their drab colours, were not well received



The 1s.9d. and 3s. were finally reprinted in 'multicolour' in November 1963 and April 1964



De La Rue used two blue cylinders, both numbered '1', for early printings of the 3d. They can be distinguished by the size of the blue numeral

Chalk surfaced paper

With little or no prior warning, sheets of the 1d., 3d., 4d. and 6d. values were placed on sale during 1965, printed on paper with similar watermark characteristics but with heavy chalk surfacing. The quality of print was much improved with less 'grain' to the background. These are relatively easy to detect but caution should be exercised with the 4d. value. Whilst used copies can be found, generally postmarked from mid 1966 or later, mint copies are amongst the great rarities of this issue. Bright fluorescence, both front and back, under ultraviolet light is an additional although not, in itself, conclusive test. Purchase from a reputable source would be a strong recommendation if looking to acquire a mint copy of this rarity.



In 1965, without prior warning, sheets of the 1d., 3d., 4d. and 6d. values appeared printed on paper with heavy chalk surfacing. The quality of print was much improved, with less background 'grain'

Harrisons also introduced a chalk-surfaced paper whilst reprinting the 2s., 5s. and 10s. values in 1966. The new paper is much whiter than the original and there are strong shade variations in the printed stamps.

Perforations

Both De La Rue and Harrisons used comb heads for perforating the printed sheets and a range of single, double and even triple comb heads were used during the life of the issue. The original low values ($\frac{1}{2}$ d., 1d., 2d., 3d., 4d., 6d. and 8d.) printed by De La Rue were perforated on the web as the paper left the printing machine and a single comb head gauging $14\frac{1}{2} \times 14$ was used. Stamps printed by Harrisons were perforated using a double comb head gauging $14\frac{1}{4} \times 14$ for the 9d., 1s. and 1s.9d. values with the 1s.3d. and 1s.6d. values gauging $14 \times 14\frac{1}{4}$. A triple comb head was used for the 2s.6d., 3s. (sepia) and 10s. which were perforated vertically $14\frac{1}{4} \times 14$ and 2s., 5s. and £1 perforated horizontally $14 \times 14\frac{1}{4}$. Finally, a single comb head was used for a period to perforate sheets of the 2s. and 5s. on both original and chalk-surfaced paper. This same head was used latterly for sheets of the 2s.6d., 3s. (multicolour) and 10s. on chalk-surfaced paper.

Examples of partial or completely doubled strikes of the comb head can be found on many values and are, for those interested in such detail, a useful indicator as to the type



Three booklet printings were produced. The first two stapled and the third stitched

of comb used and direction of movement through the sheet.

One of the most noteworthy aspects of the Third Pictorial issue was the use of an unusual comb perforating head supplied by Messrs Chambon and Sons. Although similar formats of comb were used to perforate stamps for other postal administrations (A

number of Israeli issues for example were perforated using Chambon perforating heads) these were certainly unique in New Zealand philately.

De La Rue used this perforating head, in conjunction with their Chambon printing presses, for the $\frac{1}{2}$ d., 1d., 2d., 3d., 4d., 6d. and 8d. values. The gauge of the perforations

Double comb perfs

A blind perf in every other row and two close perforation holes between the first and second rows are indicative of a double comb perforating head moving vertically



A double strike of the single comb moving vertically through a sheet of $2\frac{1}{2}$ d. stamps
A second strike of the comb head, moving horizontally across the sheet of the 5d. value



remained $14\frac{1}{2} \times 14$, however the special feature of the Chambon perforating head was the 'H' shaped comb. At one strike it perforated a complete horizontal row of stamps together with half of the vertical sides of all adjacent stamps in the rows immediately above and below. Its use is often evidenced by the presence of 'wide' or 'narrow' perforations half-way down both vertical sides of a stamp. It is often referred to as 'experimental' and blocks which show clear characteristics of the perforating head generally retail at a premium to examples with 'standard' comb characteristics, despite the fact that its use was far more extensive than any of the other comb heads.

Examples of the Chambon perfs are also to be found on booklet panes and coil stamps produced from printed sheets.

Booklets

The first issue of booklets, with a face value of 4s., was placed on sale on 1 September 1960. It contained 12 1d. and 12 3d. stamps (each in panes of six), a page of airmail labels, waxed paper interleaving and a number of panes of advertising. A second issue of booklets was issued in June 1962 which had a number of changes to the advertising panes but also two panes of $\frac{1}{2}$ d. stamps, giving a face value of 4s.6d. 12 $\frac{1}{2}$ d. stamps far exceeded public requirement and in 1964 a third issue, containing just one pane of $\frac{1}{2}$ d. stamps, was placed on sale with a face value of 4s.3d. Further alterations were made to the advertisements and the book was stitched, whereas the first two issues had been stapled.

'Narrow' or 'wide' perforations down the vertical sides are characteristic of the 'Chambon' perforating head



Numbers, from 1 to 6, were inserted at six positions on the printing plate for the third issue of booklets

A separate printing plate was used to produce the stamps for booklet production and for the third printing the numbers 1 to 6 were inserted at six positions on the printing cylinder resulting in these numbers being printed on the binding selvedge adjacent to the top left stamp in each pane of six stamps.

Coil stamps—vending machine coils

The 1d. Karaka and 3d. Kowhai were required for use in coin in the slot vending machines, replacing the previous Small Queen definitives, and the first were produced in September 1960 from sheets of stamps supplied by De La Rue. The Government Printer's Office prepared continuous coils of 480 or 960 stamps, wound horizontally, with a join every 12 stamps.

In late 1963 a new development in New Zealand coil stamps was the production of continuous rolls of stamps for vending machines. Printed on a continuous web, they are easily distinguishable from stamps produced in sheet form as the watermark is sideways and the perforations gauge $14\frac{1}{2} \times 13$. The splitting of rolls into individual coils was still undertaken in New Zealand. Although web printed coils were the norm in most countries, the USA having used such a process since 1914, the New Zealand Post Office seemed bedeviled by practical problems with the coils. Occasionally the reels would split, necessitating repair with strips of stamp paper.

Late in the life of the issue, vending machine coils were once again produced by coiling standard sheets, although the stamps were printed on chalk-surfaced paper which had been introduced for the 1d. in 1965 and 3d. in 1966.

'Lightning' coils

Whilst many New Zealand businesses used metered mailing machines for their post, some preferred to use stamps and a number of stamp affixing machines were commercially available. One such was the 'Lightning Stamp Affixer'. Used in New Zealand as early as the 1930s, special coils were prepared by the Government Printer for use in these devices. Throughout the period of issue of the 1960 Pictorials rolls of 480 stamps were prepared. 2d., $2\frac{1}{2}$ d., 3d. and 4d. values were rolled reflecting the principal inland postal rate at



Block of 1d. value showing 'narrow' perfs in top and bottom rows
Block of 2d. value showing (top row) 'wide' perfs and (bottom row) 'narrow' perfs
1d. Booklet pane, from stapled booklet, showing 'narrow' perfs along centre of bottom row
3d. Counter coil pair with 'narrow' perfs on top stamp



NEW ZEALAND
1d. POSTAGE STAMP REEL
(960 STAMPS)
VALUE



Vending machine coils.
Start papers for the initial issue
showing the date of coiling

NEW ZEALAND
3d. POSTAGE STAMP REEL
(960 STAMPS)
VALUE:— £12 0s. 0d.

Only 1d. and 3d. values were made available
for vending machines, prepared from
standard sheets with a join every 12 stamps

In 1963 continuous rolls were
produced. The watermark
was now sideways and the
perforations gauge 14½×13.
The wrappers were not glued
to the roll but formed a band
round the finished roll

where those varieties occur in the first or last
row of the sheet (or first or last column where
rolling was horizontal) they can be collected
in counter coil pairs.

The 2d., 3d., 4d., 6d. and 8d. values can
be found with evidence of the 'Chambon'
perforations.

Around August 1966 the printers, De La
Rue, processed another order for low value
definitives. Part of the consignment was
printed on chalk-surfaced paper and on
receipt some of the 3d. and 6d. sheets were
used to make counter rolls. Coil-join pairs
with stamps printed on chalk-surfaced paper
are quite scarce, however even more elusive
are *se-tenant* coil-join pairs of the 3d. value
printed on plain and chalk-surfaced paper.
This combination arose when, during the
rolling process, a mixture of sheets printed
on the two papers was used. This resulted in
all chalk-surfaced coil-join pairs numbered 1,
2, 3 and 18 and mixed pairs numbered 4,
17 and 19. These mixed coil-join pairs are
particularly scarce.

Stamp rolls were produced for business customers to use with the 'Lightning' stamp applicator



various times. Because most collectors were
largely unaware of these coils, few were saved
and examples remain scarce. Prepared from
standard sheets and rolled horizontally (as
distinct from counter-coils that were rolled
vertically) it is possible to find coil joins or
possibly the 'lead papers' that were wrapped
round the roll prior to use. These papers
are inscribed 'Lightning Roll', together with
the stamp value and total roll value, which
included a 4d. surcharge as a rolling fee.

Counter coils

An interesting facet of New Zealand philately
is the, so called, 'counter coil'. As early as
1945 the Post Office introduced a counter-
top dispenser which held strips of current
definitive stamps in roll form which could be
drawn off, on demand, by the counter clerk.
The coils were not specially printed but were
made up from sheets joined together by the
selvages. For accounting purposes a number
was printed at each join, which, unlike other
coil formats was not hidden, and pairs of
stamps showing a numbered join are highly
collectable. Counter coils remained in use
until the late 1970s.

With the 1960 pictorials the coils were
produced by joining sheets along the top and
bottom selvages or side selvages and rolled
vertically (low values and 1s.3d. and 1s.6d.)
and horizontally for other values. The lower
values, to 8d., were processed into rolls of 480
stamps with 24 sections of 20 stamps, whilst
the others were in rolls of 320 stamps, 24
sections of 16 stamps. Consequently numbers
printed at the joins are from 1 to 23 for the
lower values and 1 to 19 for all other values.

Before the rolling process began a sheet of
coloured paper was attached to the first sheet
of stamps. After 'slitting' into individual rolls
this created an 'end paper'. A second sheet

of paper, printed with details of the coil, was
attached to the last sheet of stamps and in
turn became the 'start paper' for the roll. The
date of rolling was stamped on both start and
end papers. A range of different coloured
papers was used across the values.

The first counter coils produced were for
2d., 4d., 1s., 1s.6d. and 1s.9d. values and the
numbers printed on the joins were in black.
It soon became apparent that 'Sheet Value'
markings in the selvage of some values made
it difficult to read the printed numbers. As a
result these and all subsequent values were
produced with the section numbers in red. In
addition to the initial values prepared, coils
of the 2½d., 3d., 6d., 8d., 1s.3d. and 1s.9d.
(multicolour) were produced during the
period of issue of the pictorials.

Naturally any flaws and retouches found
on the sheets used to produce the counter
coil rolls are present in the finished roll and,

Varieties

The 1960 Third Pictorials present the
collector with an almost endless range of
varieties from minor 'flyspeck' to dramatic
missing colours and much in between.
Something to suit all pockets and all degrees
of specialisation.

The nature of the photogravure process
and the techniques used to convert the
original artwork into a finished postage stamp
provide a wealth of new errors and varieties
not seen in the age of the engraved stamp. It
is beyond the scope of this article to discuss
these in detail, but constant flaws may be
found on the stamps or, if it was deemed
necessary to correct these before printing,
stamps may be found with 'touching up'. If
the flaw becomes apparent after printing, or
it becomes more extensive, then the printing
plate or cylinder may be retouched. In some
cases this may happen several times, resulting



Initial supplies
of 'counter coils'
had the numbers
printed in black.
It was claimed
the black
numbers could
be difficult to
read against the
sheet selvage
markings and
they were later
changed to red

Different coloured papers were used for the 'start' and 'end' papers



3d. counter coil-join (1) with both stamps on chalk-surfaced paper and (4) *se-tenant* pair with upper stamp on ordinary paper and lower stamp on chalky paper.



3d. coil-join number 5—Row 20/10 (upper stamp) dash of colour by bottom right centre frond

3d. coil-join number 1—Row 1/2 (lower stamp) break at centre of main branch

8d. coil-join—Row 1/9 (lower stamp)—bite out of leaf to extreme left



19d. khaki—Row 6/16—extensive area of touching up on hill top to right of aircraft

in different 'states' of retouch. Introduction of a totally new cylinder may be required at which point early flaws and retouches may disappear and new ones appear. Those interested in more specialised information on this subject are referred to the series of Handbooks published by the Royal Philatelic Society of New Zealand. [Ref 2, 3]

In the photogravure printing process ink is applied to the revolving cylinder by an inking roller and surplus ink removed, by a wiper or 'doctor' blade, from the non-printing surface of the plate. Coloured or colourless lines can be found on stamps where the doctor

Colour shifts can be quite spectacular



blade has trapped dirt or foreign matter and dragged it across the plate surface, has been lifted on contact with foreign material or, at worst, has been damaged. Examples can vary from hairlines to wide bands of colour.

Missing colours

Whilst misplaced colours may be of limited philatelic significance, they can, at times, be spectacular, as is the case with those found on the 2½d. value where misplacement of the red of the berries is sometimes referred to as 'fruit salad'. A number of sheets of the 1s.9d. multicolour were found with a major displacement of the red colour giving, in some cases two planes on one stamp!

Missing colours may occur, with sheet-fed printing, when two sheets pass through the printing machine simultaneously. With high-speed printing processes, and the introduction of printing on a continuous reel or web, colours may be missing from one or two rows or simply part of a row. Such an error is caused by a temporary loss of pressure on the paper against the printing cylinder, perhaps when the machine is stopped for adjustment or maintenance. Examples of missing, or partially missing, colours can be found on nearly every value in this series. Some, like the 2d. value with missing black, are quite spectacular as the country name is missing!

Another feature of modern continuous production processes, like newspaper printing, is the need to generate large rolls of paper either for printing directly on rotary



web-fed presses or for production of sheets for sheet-fed presses. In the paper production or coating process, or during the printing process itself, if the web breaks, or a new roll needs to be connected to an old one then the two ends are overlapped and glued. A narrow strip of double thickness paper is created which may ultimately pass through the printing machine. Affected sheets are generally removed during post-production quality control checks but examples of the 1s. and 2s.6d. values are known with these characteristic reel joins. As both values were printed on sheet-fed presses the paper-join must have been created during the paper production process prior to guillotining into sheets for printing.

Missing Colours

2d.—black (including country name) progressively missing



1d.—upper stamp orange omitted
3d.—lower stamp yellow omitted



Examples of 'Doctor' blade flaws which can vary from a thin colourless line to a broad band of colour

Caveat emptor!

Finally a few words of caution for those interested in major errors from this period. Some years ago pre-issue proof material from the De La Rue archives was sold into the philatelic market. This included a number of single-colour printings (often referred to as colour separations) in full sheet form. The 3d. value from the 1963 Railway Centenary Issue and the 2d., 3d., and 6d. values of the 1960 pictorial definitives are found in this format. For each value a series of separated colours, and a final printing using all colours, exists. With the 2d. Kowhai-Ngutupaka and 3d. Kowhai each series is printed on watermarked paper. The 2d. printings were not perforated so any examples of the 2d. value, in the issued colours,



offered imperforate should be considered with a degree of scepticism. Even more caution should be exercised with the 3d. value. The series of proofs for this particular value were printed on watermarked, gummed paper and perforated just as the issued stamps would have been. As a series these offer a fascinating insight into the printing process, however a number of examples of the blue-green colour separation, on its own, have been offered for sale in recent years and described as 'three colours missing'. Now, as we have seen, missing colours are quite common in this issue, but three colours missing on one stamp, passing unnoticed over a post office counter, is highly unlikely. Further confirmation that these stamps were originally from the De La Rue pre-issue trial printings is found in the shade which is a cold grey-blue colour. This shade is not recorded as having been used for any printing of the 3d. value sold through Post Offices.

Examples of De La Rue proof material 2d.—imperf on gummed and watermarked paper taken from a series of progressive proofs



3d.—not 'three colours missing' but a single colour printing made by De La Rue prior to initial print runs



2s.—one sheet was found at the Auckland Post Office with the buff partially missing from the last vertical row of six stamps

A scarce example of a paper overlap where two rolls of paper have been joined together, this is less obvious from the front



References

- 1 Laurie Franks, *All the Stamps of New Zealand* (A H & A W Reed, 1977) p.88
- 2 *The Postage Stamps of New Zealand*, Vol IV, (1964), Chapter XII
- 3 *The Postage Stamps of New Zealand*, Vol VI, (1977), Chapter X

Paul Wreglesworth is a member of the New Zealand Society of Great Britain. The Society caters for all levels of collector with an interest in the stamps or postal history of New Zealand and its dependencies. Regular meetings are held in London, together with regional meetings in Scotland, the North of England, the Midlands and the South West. Members benefit from a circulating packet, annual auction, library facilities and bi-monthly magazine, *The Kiwi*.

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