# Snow in, or on the outskirts of, Pietermaritzburg (1851–2013)

by P.G. Alcock

NOW in KwaZulu-Natal has received very little attention in the literature. A pioneering study of snow on the KwaZulu-Natal Drakensberg was undertaken for the period 1989–2004.2 The authors, amongst other things, examined the geographic distribution of snow on the Drakensberg and identified three "snow seasons" in the Berg. These are: (a) an early-snow season (April-June), (b) a mid-snow season (July and August), and (c) a late-snow season (September and October). The most widespread snow cover in the Drakensberg was in July, for all terrain above 2 600 m. The greatest monthly occurrence of snow was in August, although the snow was confined to higher altitudes than in the

previous two months due to the warmer conditions. The study was based on satellite imagery, given the lack of data on snow in KwaZulu-Natal generally, and especially in the uninhabited reaches of the Drakensberg. Snow in South Africa, in essence, can be described as an observational phenomenon, but which is not scientifically measured like rainfall.

The incidence of snow in KwaZulu-Natal as a province can be divided into that falling only on the KwaZulu-Natal Drakensberg proper (a fairly common occurrence in the cold season), and less frequently snow on the Drakensberg *and* to a varying extent on the high-lying KwaZulu-Natal Midlands and elsewhere. There is a further situation incorporating these two categories

which is sometimes encountered. This concerns snow in Pietermaritzburg, or on the hills overlooking the city, but below the Hilton ridge (defined as the approximate locality of Crossways Hotel). The Hilton ridge constitutes the beginning of the KwaZulu-Natal Midlands. This third category of snow provides visual evidence of a cold weather system with an especially low freezing level, and is the subject of the current paper.

Snow on the KwaZulu-Natal Drakensberg is a scenic wonder which attracts sightseers to the Drakensberg resorts (i.e. is good for the hospitality industry). The same can be said for snow in the KwaZulu-Natal Midlands. although in this case snow is a mixed blessing. Heavy falls can bring down power lines and telephone cables, block roads, trapping or delaying motorists or leading to accidents, disrupt rail services, cause damage to commercial forestry plantations and property generally, and result in livestock dying of exposure. Also of relevance is the danger of low freezing levels for flights by light aircraft. Snow damage to commercial timber species in KwaZulu-Natal and other parts of South Africa has been investigated inter alia by the Institute for Commercial Forestry Research in Pietermaritzburg and certain forestry companies. Heavy snow in the Midlands in more historical times was probably less severely regarded, when households were isolated, largely selfsufficient and less reliant on a modern integrated economy.

Possibly the first recorded instance of snow in, or above Pietermaritzburg, refers to 6 May 1851 when snow "lay thickly on the hills overlooking the camp". The military camp under discussion (Fort Napier) is in the present-

day suburb of Napierville. Thick snow also covered the Swartkop or Zwartkop (Zwaartkop) Mountain on the same day.4 A further report, for a lower altitude, was on 21 September 1853 when snow was seen half-way down Town Hill.<sup>5</sup> (See page 81 for localities in and around Pietermaritzburg mentioned in the text.) A later report was for July and August 1869 when Pietermaritzburg experienced intense cold.6 It was said that "ice was several inches thick, and heavy falls of snow covered the hills beyond the camp". Confirmation of snow in the winter of 1869 was provided by Frances Colenso, the wife of Bishop John Colenso, in a letter dated 18 September 1869.7 Mrs Colenso, from the vantage point of Bishopstowe on the eastern side of Pietermaritzburg, noted the presence of snow "on the neighbouring hills" which lasted for more than a week. The actual date of this event was not stated, however. Another report for August 1869 was that snow was "lightly spread over the hills overlooking the Town Bush valley".8 Snow also "fell heavily for three days over Northern Natal" in August 1869.9 Snow was again evident in Pietermaritzburg in September 1873 and July 1874, although it is very probable that the snow fell "on the heights above Maritzburg", rather than lower down.<sup>10</sup> A subsequent sighting of snow "along the Town Hill range and Swartkop" was on 1 August 1898.11

Other instances of snow in, or on, the hills overlooking Pietermaritzburg are listed below:

#### 10-12 June 1902

The "most severe" snowstorm to have occurred since records were kept (up to 1902) swept over large parts of South

Africa.12 The snowstorm became known as the "Peace Snow", a reference to the end of the Anglo-Boer War on 31 May 1902. Snow fell almost continuously for three days in the Karoo, the Eastern and North Eastern Cape, the Orange Free State and Natal. The snow was accompanied by very strong winds (evidently gale-force in some areas) and rain. Major losses of livestock were reported. More than 13 000 sheep died of exposure in East Griqualand, where the snow was said to have an average depth of 1.5 m. No mention was made of snow on Swartkop, although "the range of hills" adjoining Swartkop was covered in thick snow.<sup>13</sup> Snow fell on the Drakensberg and at Charlestown. Heavy falls of snow were evident in Ixopo as well as near Bulwer and Edendale (the last-mentioned slightly to the west of Pietermaritzburg). Snow also fell on a series of hills in the vicinity of Richmond. High winds caused considerable damage to timber plantations and the roofs of houses in the environs of Swartkop. A number of buildings in Richmond and Ixopo were destroyed by the winds.

# 31 May-1 June 1905

The Great Blizzard, as it was known, struck Natal and adjacent territories. <sup>14,15,16</sup> Intense winds with rain, hail, snowfalls, flooding, thunder and lightning caused widespread devastation in much of Natal. Many people died of exposure and were later found buried in snowdrifts. Others were killed by lightning or drowned. Livestock losses were reported from across Natal. Snow fell on the platforms of the Pietermaritzburg railway station in Napierville. Deep snowdrifts were observed in Mooi River and Nottingham Road. The

strong winds blew snow onto verandas and over the tops of gates and fences. Some oxen were buried in snow with only their noses visible. Trees and telegraph poles as well as wood and iron houses were blown over by the winds. Airborne sheets of corrugated iron killed some cattle in Pietermaritzburg. Railway lines, bridges, embankments and sea-piers were carried away by surging floodwaters or immensely destructive onshore waves. Several small and larger vessels sank, including the entire ferry fleet belonging to a Durban shipping firm.

## 21-22 June 1915

Rain and snow fell in many parts of Natal.<sup>17</sup> The slopes of Swartkop were covered in snow, with snow also visible slightly lower down at Boshoff's Road (a railway siding) in Mount Michael. Snow likewise fell on the Drakensberg and in Umzimkulu and East Griqualand, Ixopo, Bulwer, Byrne, Nel's Rust (Baynesfield), Karkloof, Howick, Curry's Post, Nottingham Road, Rosetta, Mooi River, Estcourt, Riet Vlei, Greytown, Elandslaagte, Waschbank, Dundee, Glencoe, Besters, on the Biggarsberg and in Wakkerstroom. An advertisement entitled "Snow on Zwaartkop" was inserted in the Natal Witness, 3 July 1915 by W. Watson Robertson Studio of Chapel Street, urging readers to buy "excellent photographs of this unusual and picturesque sight".

## 18-19 July 1915

An official parade to welcome back the 47 officers and 853 men of the 1st and 2nd Natal Carbineers and the attached Natal Telegraph Corps was held on 19 July 1915 during World War I. 18 The event was attended by the Governor-

General of South Africa and his wife (Lord and Lady Buxton). The venue was the Oval and Pavilion in Alexandra Park, near the centre of Pietermaritzburg. The troops had just returned to the city following the capitulation of Deutsch-Südwestafrika (German South West Africa) on 9 July 1915. The day of the parade was described as "bleak and bitter" with a strong and piercing wind blowing off the "snow-clad mountains" (presumably the Drakensberg). A final atmospheric insult was "a shower of stinging sleet". The lightly-dressed men, notwithstanding the weather, were kept on parade for over three hours. Snow also fell at Edendale, evidently in the early hours of the morning, with the flanks of Swartkop being covered in light snow. A somewhat confusing comment in the Natal Witness was that this was the second time in the month that a "local snowfall" had occurred. This statement was probably a mistaken reference to the snow in late June 1915. Heavy snow fell in parts of the Transvaal (including Johannesburg) and as far north as Pilgrim's Rest. Heavy snow likewise fell in many localities in the Orange Free State and in some areas in the Cape.

## 7–8 September 1921

Heavy snow and rain was reported in many parts of Natal.<sup>19</sup> A "large fall of snow" was plainly visible on the top and slopes of Swartkop. Snow was also seen on the hills surrounding Swartkop and in Hilton and Cedara. Railway trucks arriving in Pietermaritzburg from upcountry on 8 September were covered in snow. Snow was present in Himeville, Bulwer, Dargle, Kamberg, Byrne, Nel's Rust, Howick, Nottingham Road, Mooi River, Greytown, Ladysmith, Dundee,

Newcastle, Utrecht, Volksrust and Harrismith. A photograph of the snow-capped Swartkop was published on the front page of the *Natal Witness* on 12 September 1921. A different report also refers to snow in Kokstad and Van Reenen's Pass.<sup>20</sup> More snow fell on 9 September 1921 in the South Eastern Transvaal and in Johannesburg.

#### 26-27 June 1922

Swartkop was described as being "clad in a white mantle", with snow also evident on the tops of nearby hills.21 The road through Cedara was "blocked by snow", while thick snow was observed at Elandskop. The annual agricultural show at Ixopo had to be postponed due to snow covering the ground and roads. Snow fell in Harding and the surrounding district. Snow was also reported in Byrne.<sup>22</sup> A photograph of Swartkop taken in the last week of June 1922, and showing snow on the slopes and top, was very fortuitously reproduced by "Pilgrim" (a regular columnist) writing in the Natal Witness, 4 July 1964. (See below.)

## 26 August 1927

A snowstorm (regarded as one of the "heaviest" ever to strike Natal) occurred in the evening of Friday, 26 August 1927.<sup>23</sup> Snow was visible on the slopes and top of Swartkop, and on the hills around Pietermaritzburg. Town Hill was a particularly good vantage point for viewing the snow, which remained on the ground for the entire weekend (27–28 August 1927). The front page report of the snowfall in the *Natal Witness* of 29 April 1927 was accompanied by a photograph of the snow-laden Swartkop. The Drakensberg, in turn, was a "wall of ice and snow". Snow also

fell throughout the Gourton district (the Winterton-Loskop area). The landscape to the north of Howick resembled Switzerland, with birds and rabbits dving of exposure in Rosetta. The branches of wattle trees in the Midlands were damaged by the weight of the snow. Snow was reported in Franklin, Kokstad, on the Ingeli Mountain near Weza, on the hills overlooking Estcourt, in Mooi River, and in Weenen and on high-lying terrain near the town. Snow likewise fell. on the N'Kandhla Mountains and the Qudeni Range as well as elsewhere in the vicinity, on the Biggarsberg and environs, and in Dundee and Harrismith.

## 8-10 July 1929

Heavy snow and rain fell in many areas in Natal.<sup>24</sup> Swartkop was covered in snow. Snow fell in Underberg, Ixopo, Elandskop, Nottingham Road, Mooi River, Harrismith and the Orange Free State. Snow was likewise seen between Creighton and Kokstad as well as in Franklin, Matatiele and other places in East Griqualand. Snow also fell in more distant parts of the Cape Province such as Middelburg, Cradock, Somerset East, Beaufort West, Graaff-Reinet and George.

## 10-11 September 1936

Heavy snow fell over the whole of the Drakensberg and in many localities in Natal.<sup>25</sup> Snow was observed on Swartkop and in Underberg, Nottingham Road, Karkloof, the Glencoe district, Dundee, Newcastle, the Vryheid district, Van Reenen's Pass, Harrismith, in the Kokstad district and in East Griqualand. Snow was reported further afield in the Eastern Cape and the Orange Free State. Snow also fell in many areas in

the Transvaal including Johannesburg and as far north as Nylstroom.

# 21-23 September 1956

A severe cold spell struck Natal and East Griqualand, with gale-force winds, sleet, snow and rain evident.<sup>26</sup> There were "snowstorms" in Sweetwaters, Hilton, Nottingham Road and near the Hella-Hella Pass to the west of Richmond. Snow covered the peaks of the Drakensberg.<sup>26</sup> Snow also fell in Byrne.<sup>22</sup> Electricity and telephone networks as well as buildings were damaged in many areas by the high winds.<sup>26</sup> Very cold conditions were likewise experienced in parts of the Cape, the Orange Free State and the Transvaal.

## 30-31 August 1959

Heavy snow fell over East Griqualand and the Natal interior as well as on mountains in the Boland and the Southern Cape. <sup>27</sup> A more detailed report was of light snow on Swartkop and in Hilton, Winterskloof and Sweetwaters. <sup>28</sup> Heavier falls of snow occurred in parts of the Drakensberg as well as in Himeville, Creighton, Ixopo, Impendle, Nottingham Road, Estcourt, Greytown, Volksrust and in the Eastern Cape (Umtata).

## 5-6 July 1964

Snow was seen on the upper slopes and top of Swartkop, in Winterskloof and below the Hilton ridge in the vicinity of the Hilton Hotel.<sup>29</sup> Snow was also observed lower down in Sweetwaters as well as in the Midlands extending to Mooi River.<sup>30</sup> Snow fell in the foothills of the Drakensberg and in Hilton, Boston, Elandskop, Impendle, Dargle, Howick, near Byrne and in Greytown

and Kokstad. Of particular interest was snow on the Edendale Heights (to the west of Swartkop) and on the hills around Raisethorpe (possibly the locality described by Mrs Colenso). Light snowfalls were reported on mountain ranges in the Western Cape. Pilgrim, writing in the Natal Witness of 7 July 1964, referred to a photograph of snow in the garden of a property at the top of Old Howick Road very close to the Pietermaritzburg municipal boundary with Hilton (i.e. marginally below the Hilton ridge). The photograph was taken on 5 July 1964. A photograph of the snow-capped Swartkop, taken on the same day, appeared in the Natal Witness on 6 July 1964.

#### 18-19 October 1965

Light snow was noted on Swartkop<sup>31</sup> as well as lower down in Mount Michael/Winterskloof.<sup>32</sup> Heavy falls of snow were evident in Northern Natal, East Griqualand and the Eastern Cape.<sup>31</sup> Heavy snow was likewise seen in Elandskop and Volksrust. Snow also fell in parts of the Drakensberg.

## 10-11 August 1973

Snow fell in Winterskloof.<sup>33</sup> A more complete account was of heavy snow in Natal and East Griqualand including the Drakensberg resorts, Underberg, Highflats, Boston, Impendle, Kokstad, Cedarville and Matatiele.<sup>34</sup> Besides Winterskloof, snow was also observed in Hilton, Cedara, Howick, Tweedie, Dargle, Lidgetton<sup>34</sup> and Byrne.<sup>22</sup>

## 13-14 June 1983

Snow was seen on Swartkop.<sup>35</sup> Light snowfalls were reported in the Drakensberg near Matatiele as well as to the north in the vicinity of Champagne Castle and Cathkin Peak.<sup>36</sup> Snow also

fell in the Maluti Mountains and in the higher-lying parts of Southern Lesotho.

#### 12-14 June 1984

Snow, sleet and driving rain was apparent in most parts of Natal.37 Light falls of snow occurred in Sweetwaters. Winterskloof and Hilton, Heavier falls of snow were seen on the Drakensberg and in Underberg, Bulwer, Boston, Richmond, Karkloof, Merrivale, Balgowan, Nottingham Road, Estcourt, Mooi River and near Ladysmith.<sup>37</sup> Snow fell in Byrne.22 Snow also fell in Newcastle and the surrounding district, and in Vryheid, Kokstad and Matatiele.37 Heavy snowfalls occurred in the Eastern Cape, resulting in the closure of several mountain passes.<sup>38</sup> Snow likewise fell in Volksrust, Memel, Vrede, Kestell and Bethlehem.

## 9-10 July 1988

Snow was observed on the slopes of Swartkop and in Mount Michael.<sup>32</sup> Another report of snow in the form of flakes also refers to Mount Michael.<sup>39</sup> Widespread snow was evident in Natal, with most of the Midlands being snowbound.<sup>40</sup> Snow was seen on the Drakensberg and in Boston<sup>40</sup> and Byrne.<sup>22</sup> Heavy falls occurred in Underberg and Himeville.<sup>40</sup> Snow also fell in Lesotho, the Southern Free State and the Western Cape.

#### 28-29 June 1994

Snow flakes were noted in Mount Michael.<sup>39</sup> The Drakensberg was covered in snow.<sup>41</sup> Snow was observed in Elandskop and in the Midlands, with heavy snowfalls being reported in Bulwer, Boston and Merrivale. Snow also fell in many parts of the Cape and the Transvaal, in Lesotho, in central

Johannesburg and on Table Mountain (Cape Town).

# 6-7 July 1996

Snow was seen in Mount Michael. 42 Widespread falls of snow occurred in KwaZulu-Natal (including the Drakensberg and the Midlands), in elevated terrain in Mpumalanga, in the Free State and in the Western and Eastern Cape. 43 The roofs of buildings in Underberg collapsed under the weight of snow. Heavy rain fell in parts of KwaZulu-Natal. Motorists were trapped by deep snow at Van Reenen's Pass. All road links to the Free State and Johannesburg were severed. Many other roads in KwaZulu-Natal were closed. The heaviest falls of snow in years were reported in some areas of North-West Province.

## 29-30 June 1997

Snow flakes were observed in Mount Michael.<sup>39</sup> Snow fell in parts of the Drakensberg and in the Midlands.<sup>44</sup> Snow was likewise seen in Underberg, Boston, Kamberg and Kokstad.

## 19-20 July 2002

Snow was noted just below the Hilton ridge. <sup>39</sup> Snow fell in the KwaZulu-Natal Drakensberg, the Eastern Cape and Lesotho. <sup>45</sup> Snow also fell in large parts of the KwaZulu-Natal Midlands including Howick. Heavy falls were apparent in Bulwer. Snow was likewise observed in Dundee and Kokstad.

#### 10-11 September 2002

Snow fell on Swartkop and just below the Hilton ridge. 46 Heavy falls of snow occurred in the Eastern Cape, with light falls in the KwaZulu-Natal Drakensberg, Swartberg and Matatiele. 47 Heavy rain was a feature of the weather conditions in the Eastern Cape.

# 6-7 September 2004

Snow was seen on the ground in the lowest reaches of Sweetwaters adjoining the suburb of Blackridge. 48 Another observation refers to snow in Mount Michael.42 Heavy snow fell in many high-lying areas in KwaZulu-Natal.49 A more comprehensive report described the KwaZulu-Natal Midlands as being covered in light snow with heavy rain evident.50 Snow fell in Winterskloof. Hilton, the hills overlooking Midmar Dam, Caversham, Otto's Bluff and Thornville. Snow also fell in the Drakensberg. Heavy snowfalls were apparent in Underberg, Harrismith, Kokstad, Matatiele and elsewhere in East Griqualand.

# 19-21 September 2008

Snow flakes were observed in Mount Michael.<sup>42</sup> Heavy snowfalls occurred in KwaZulu-Natal and the Eastern Cape.<sup>51</sup> A further report confirmed that heavy rain and snow had fallen in parts of KwaZulu-Natal.<sup>52</sup> Snow was present in Underberg, Bulwer, Ixopo, Boston, Elandskop, Dargle and Nottingham Road

## 25-26 July 2011

Snow was seen in Mount Michael.<sup>42</sup> Heavy snowfalls were reported in several high-lying areas of KwaZulu-Natal as well as in the Eastern Cape, the Free State and Mpumalanga.<sup>53</sup> A different account refers to snow in most highlying parts of KwaZulu-Natal and in the Drakensberg.<sup>54</sup> Snow fell in Byrne.<sup>22</sup> Heavy snowfalls were noted in areas such as Underberg, Kokstad, Matatiele and parts of the Eastern Cape.<sup>54</sup> The

snow was accompanied by heavy rain in some localities in KwaZulu-Natal including Pietermaritzburg. Large trucks and other vehicles were stranded at Van Reenen's Pass, with Harrismith being isolated from the rest of the country. Many roads and schools in KwaZulu-Natal were closed.

## 6-8 August 2012

Heavy snow fell in a broad band across the KwaZulu-Natal Midlands and the Drakensberg as well as in the Eastern Cape and elsewhere resulting in the N3 freeway and other roads being closed, along with the main railway line linking Durban and Johannesburg.55 Snow was seen in Byrne.22 Heavy rain fell in parts of KwaZulu-Natal.55 The top of Swartkop had an "icing-sugar like dusting of snow" which was only visible for a short while. Snow flakes, as per two observers, fell for a few minutes just below the Hilton ridge, although the flakes did not reach the ground.56,57 Snow flakes were seen in Mount Michael<sup>39,42</sup> and in World's View.58 but likewise melted before reaching the ground. The last-mentioned observation also refers to snow flakes seen briefly in World's View (again not reaching the ground) on 9 August 2012. There were no pertinent snowfalls in 2013.59

Not many firm conclusions can be derived from the incomplete snow record provided in this paper (assuming a base year of 1851). The information constitutes a first approximation only, and is merely indicative of overall impressions. It is very likely that other instances of snow have occurred with these events either not being recorded at all, especially in the earlier years,

or where the records have been lost or forgotten about. No climatological inference must be drawn concerning the apparently increased frequency of snow in the study area in the last 50 or so years. This trend probably reflects a greater settlement density and hence the availability of observers. It can be said that snow in, or on the outskirts of Pietermaritzburg, but below the Hilton ridge, may fall in a period extending from sometime in May until sometime in October on certain occasions, although almost always only once in a particular year. Snowfalls, as per the data, are fairly evenly distributed over the stated months, excluding May and October (both of which are outliers or rare occurrences). The snow (commencing and ceasing around the relevant change in seasons) consists of little more than a sprinkling or light fall, at least in more recent times, and melts within a few days. Snow in the described area is always associated with snow in parts of Hilton and further inland. An optimum locality for viewing snow locally in Pietermaritzburg is from the southerly or easterly parts of the city, looking across the bowl-shaped Msunduzi River Valley towards higher ground on the far side of Pietermaritzburg. It appears that the upper north and north westerly reaches of the city are the lowest altitudinal limit of the periodic "snow-belt" in the immediate environs of Pietermaritzburg. More research is necessary to extend this boundary zone to similar physiographic localities elsewhere in KwaZulu-Natal. The Midlands Mistbelt is an obvious point of departure.

A representation of the approximate locality of the relevant suburbs of Pietermaritzburg and adjacent areas as described in the text.

Hilton (to the north) ......

Town Bush Valley Heights

Swartkop Mount Michael

World's View

 $\rightarrow$  Bishopstowe

Town Hill Napierville

The 1 451 m high Swartkop Mountain adjoining the residential area of Mount Michael (which incorporates Winterskloof and the lower-lying Sweetwaters) overlooks Pietermaritzburg. The top of Swartkop can probably be regarded as forming part of the KwaZulu-Natal Midlands in a physiographic sense. Data for Swartkop have been included on the basis that snow on the slopes thereof is invariably associated with snow at lower elevations. Swartkop, for earlier generations of Pietermaritzburg residents, was the key identifier of snow falling locally (Hilton not being visible from the Msunduzi River Valley). World's View is a prominent spur to the east of Mount Michael, and also overlooks Pietermaritzburg. Town Hill is an elevated residential area above the Royal Show Grounds, although at a lower altitude than Mount Michael. The Town Bush Valley Heights are situated in near-proximity to the Hilton ridge. Raisethorpe is not shown, but is located to the east of the Town Bush Valley Heights on the Bishopstowe side of Pietermaritzburg.

#### NOTES

- 1 Some reports of snow may actually refer to sleet. Sleet can be defined as precipitation consisting of a mixture of snow and rain falling together, or snow melting as it falls (Weather Bureau. Weather Codes for Land Stations (Surface Observations), Pretoria, Department of Transport, 1982, p. 10). Snow can fall in the form of individual crystals or as large aggregated flakes made up of many crystals. The term "snow" has been used in this paper, given that information was derived from newspaper reports and ordinary householders, rather than trained meteorological observers. Descriptions of snow events, the geographic terminology and spelling as well as the dates thereof are according to the specific source. Some newspaper reports of snow were more detailed than others, depending on the column space available (i.e. the relative significance of this news). No spot heights, with one exception, have been provided in the paper due to the imprecise nature of the data. Caution, in other words, has been invoked here. Readers with
- a special interest in snow in South Africa should consult the following websites: (a) the South African Weather Service website (http://www.weathersa.co.za), (b) http://snowreport.co.za, (c) http://www.snow-forecast.com/maps/dynamic/southafrica, (d) http://www.stormchasing.co.za, and (e) http://sawdis1.blogspot.com. An American website to determine the date and day of the week of a particular year may prove beneficial to readers. Select the *Month, Year* and *Country* and then press *Year Calendar* or *Month Calendar*. See http://www.calendarlabs.com/online-calendar.php.
- 2 Mulder, N. and Grab, S.W. "Contemporary spatio-temporal patterns of snow cover over the Drakensberg", *South African Journal of Science*, 105 (5/6), 2009, pp. 228–33.
- 3 Hattersley, A.F. Pietermaritzburg Panorama: a Survey of One Hundred Years of an African City (Pietermaritzburg, Shuter and Shooter, 1938) p. 37.
- 4 Hattersley, A.F. *Portrait of a City* (Pietermaritzburg, Shuter and Shooter, 1951) p. 46.

- Snow was still apparent on Swartkop and the "distant hills" in the evening of 9 May 1851 (Judd, U.E.M. "Chapter 5. The foundation of the Natal Society, May 1851", *Natalia*, 5, 1975, pp. 48–52.) A different account refers to Byrne where snow fell throughout the day on 6 May 1851, resulting in bitterly cold conditions. The snow remained on the hills overlooking the settlement for three days (Gordon, R.E. *Dear Louisa: History of a Pioneer Family in Natal 1850–1888*, fifth edition, Pietermaritzburg, Intrepid Printers, 2009, p. 26).
- 5 Hattersley, A.F. More Annals of Natal: with Historical Introductions and Notes (Pietermaritzburg, Shuter and Shooter, 1936) pp. 120-1. The snowstorm, as experienced in the vicinity of the present-day Nottingham Road, extended over three days, i.e. 21-23 September 1853 (Scott Shaw, C. Stories from the Karkloof Hills, Pietermaritzburg, Shuter and Shooter, 1971, p. 57). Another writer (Wood, H.E. "Snowstorms in the Transvaal", South African Journal of Science, 6, 1909, pp. 431-40) states that there was a "great snowstorm over Eastern South Africa" on about 12 September 1853. Snow fell almost continuously for eight days. Severe livestock losses were evident on the Transvaal Highveld. Two white travellers and their trek oxen died of exposure at the Jukskei River "a few miles north of the Witwatersrand". Snow could be seen on the Drakensberg for several months. Many antelope died in snowdrifts in the deep valleys of the Drakensberg where they had sought shelter. "Swarms" of birds also perished.
- 6 Hattersley, Pietermaritzburg, p. 37. Further information for this period is that Thomas Baines, the well-known Victorian artist, naturalist and explorer, passed through Natal in 1869 on his way to the goldfields of the interior. He arrived in Pietermaritzburg around mid-February and left on 13 March (Shuter, C.F. Englishman's Inn "Engelsche Logie": an Account of the Experiences of the British Settlers and Colonists of Natal 1824-1885, Cape Town, Howard Timmins, 1963, pp. 82-4). Baines, commenting on Pietermaritzburg, remarked that "during the winter, snow may sometimes be seen on the Zwart Kop and other hills, or on the more distant Drakensberg" (Baines, T. The Gold Regions of South Eastern Africa, London, Edward Stanford, 1877, p. 156). Baines was obviously describing local (Pietermaritzburg) observations.

- 7 Rees, W. Colenso Letters from Natal (Pieter-maritzburg, Shuter and Shooter, 1958) p. 204.
- 8 Hattersley, Portrait, p. 46.
- 9 Wood, "Snowstorms", p. 431.
- 10 Ibid. p. 431. The source cited was the meteorological record (1862–1886) of the Army Medical Department at Fort Napier. The snowfall of August 1869 was noted in the record.
- 11 Personal communication: R. Haswell. This report of snow was recorded in a diary kept by a Scot, Archibald Murray Anderson, who arrived in Pietermaritzburg in 1887 and who built Aberfeldy, a magnificent double-storey Victorian mansion complete with outbuildings at 5 New England Road in the suburb of Scottsville. (Note that all personal communications listed in the present paper took place in January 2013, with the exception of Mrs P. Pellowe, who was contacted during May 2013.)
- 12 Weather Bureau. "A history of notable weather events in South Africa: 1500–1990", Caelum, December 1991, pp. 1–125. (The publication, amongst other things, lists snowfall events in South Africa. Some details of widespread snow in KwaZulu-Natal and elsewhere, and incorporating the study area, have been omitted from the text for reasons of space, but can be found in Caelum.)
- 13 Natal Witness, 14 June 1902.
- 14 Weather Bureau, "A history of notable weather events", p. 19.
- 15 S[im], T.R. and others. "The blizzard of May 31st and June 1st, 1905", *Natal Agricultural Journal and Mining Record*, 8, 1905, pp. 541; 546 and 9, 1906, pp. 49–52; 552. (Those seeking additional information on this extreme weather event should consult the contents pages of both volumes.)
- 16 Kemp, B.H. The tempest, *The Witness*, 1 June 2005, p. 13.
- 2005, p. 15. 17 *Natal Witness*, 23, 24, 25 and 26 June 1915.
- 18 Natal Witness, 20 July 1915.
- 19 Natal Witness, 9, 12 and 13 September 1921.
- 20 Weather Bureau, "A history of notable weather events", p. 27.
- 21 Natal Witness, 28 June 1922.
- 22 Personal communication: Mrs P. Pellowe.
- 23 *Natal Witness*, 29 and 30 August 1927; 2 and 7 September 1927.
- 24 Natal Witness, 10 and 11 July 1929.
- 25 Natal Witness, 12 September 1936.
- 26 Natal Witness, 24 and 25 September 1956.

  The gap in the record between 1936 and 1956 is probably due to a lack of reported

observations. Part of the problem is that the *Natal Witness*, for most of World War II, was filled with war news and there were few items of local interest. Snowfalls were evidently not regarded as significant at that time. Miss K. Nixon, a long-standing resident of Pietermaritzburg, remembers seeing snow on the top of Swartkop at some stage during the war years (possibly 1943).

- 27 Weather Bureau, "A history of notable weather events", p. 57.
- 28 Natal Witness, 1 September 1959.
- 29 Personal communication: T. Kimmince.
- 30 Natal Witness, 6 and 7 July 1964.
- 31 Natal Witness, 20 October 1965.
- 32 Personal communication: J. Upfold.33 Personal communication: Mrs B. O' Connor.
- 34 *Natal Witness*, 11 August 1973.
- 35 Personal communication: P. Walker.
- 36 Natal Witness, 14 June 1983.
- 37 Natal Witness, 14 and 15 June 1984.
- 38 Weather Bureau, "A history of notable weather events", p. 100.
- 39 Personal communication: Mrs E. Rasmussen.
- 40 Natal Witness, 11, 12 and 13 July 1988. An iconic medium-altitude aerial photograph of KwaZulu-Natal, extending from the snow-capped Drakensberg to Durban Harbour, was taken on 12 July 1988. The photographer was John Hone. The photograph is available in various sizes from selected visual arts shops in KwaZulu-Natal.

- 41 Natal Witness, 29 and 30 June 1994.
- 42 Personal communication: Mrs C. Clark.
- 43 Natal Witness, 8 and 9 July 1996.
- 44 Natal Witness, 30 June and 1 July 1997.
- 45 Natal Witness, 20 July 2002.
- 46 Personal communication: G. Raubenheimer.
- 47 Natal Witness, 11 September 2002.
- 48 Personal communication: H. Temple.
- 49 http://www.iol.co.za (accessed on 4 January 2013).
- 50 The Witness, 7 September 2004.
- 51 http://www.iol.co.za (accessed on 4 January 2013).
- 52 The Witness, 22 September 2008.
- 53 http://www.iol.co.za (accessed on 14 January 2013).
- 54 The Witness, 26 and 27 July 2011.
- 55 The Witness, 8 and 9 August 2012.
- 56 Personal communication: R. North.
- 57 Personal communication: D. Slatter.
- 58 Personal communication: H. and C. Richardson.
- 59 Should any additional information for the period of record come to the attention of the author, then this data will be published in an addendum in the next edition of *Natalia* (i.e. *Natalia*, 44, 2014). Readers, some years hence, who wish to update the record should begin their search from 1 May 2014.

The author would like to thank all those who provided information, or who suggested other people to contact. Such assistance is highly appreciated. Thanks are also due to the staff of the Msunduzi Municipal Library in Pietermaritzburg for their very kind help. Mrs S. Mahlatsi, the librarian at The Witness editorial office, was likewise most helpful.