SOUTHERN AFRICAN BIRD ATLAS PROJECT 2
SABAP2

Report 1 July 2007–30 June 2008

1. How far had we got at the end of the first year of SABAP2?

Table 1. Progress statistics for the provinces and Lesotho and Swaziland as at 30 June 2008

Province/Country	Total pentads	Pentads covered	Percentage covered	Total cards	Total Records	Average spec/card	Maximum spec/card
Eastern Cape	2273	136	6.0	307	18548	60.4	124
Free State	1863	143	7.7	279	14173	50.8	114
Gauteng	271	173	63.8	551	29951	54.4	131
KwaZulu-Natal	1278	234	18.3	578	35215	60.9	169
Lesotho	415	22	5.3	27	699	25.9	76
Limpopo	1543	181	11.7	511	32474	63.5	147
Mpumalanga	1088	207	19.0	400	22226	55.6	151
North West	1486	94	6.3	189	10433	55.2	133
Northern Cape	5102	102	2.0	164	7478	45.6	113
Swaziland	193	11	5.7	27	2320	85.9	116
Western Cape	1828	378	20.7	979	49633	50.7	113
TOTAL	**17340**	1681	9.69	4012	223150	55.6	

Overall, 9.7% of the 17340 pentads in the atlas region (South Africa, Lesotho and Swaziland) were visited at least once and had the data submitted by 1 July 2008. (The 10% mark was reached nine days later, on 10 July.)

Looking carefully at Table 1, it is clear that, at the end of the first year of SABAP2, excellent progress had been made in four of the 11 regions: Gauteng, Western Cape, KwaZulu-Natal and Mpumalanga, and good progress in Limpopo. Progress is lagging in the Eastern Cape, North West, Lesotho, Free State and Swaziland. Progress in the Northern Cape is slow. Unfortunately, three of the provinces of South Africa in which progress is slow are also the three largest provinces (Northern Cape, Eastern Cape and Free State). Apart from the Free State, where the pace has increased dramatically in the last three months of the reporting period, the provinces making slow progress also seem to be lagging further behind.

Although 10% does not immediately sound like impressive progress, it needs to be borne in mind that, for SABAP1, the same area was split into 2000 quarter degree grid cells, and that it took five years to cover them. Visiting more than 1700 pentads in the first year of SABAP2 represents a major achievement. There is no intention to attempt to visit every single pentad, but SABAP2 needs data

from throughout the region. It is a major achievement that nearly two-thirds of all the half-degree grid cells in the region had at least one pentad covered, and more than one-third of all the quarter degree grid cells had at least one pentad covered.

2. Did the rate of fieldwork increase during the year?

Table 2. Monthly summary statistics; data collected according to the main project protocol for the period to 30 June 2008, as at 31 July 2008. Data are allocated to the month in which they were collected, not the month of submission.

Month	New pentads	Checklists	Records	Records/ checklist	New pentads/ checklist
June 2007	6	6	294	49.0	100.0
July 2007	109	137	7138	52.1	79.6
August 2007	141	230	11837	51.5	61.3
September 2007	130	260	14887	57.3	50.0
October 2007	105	251	14710	58.6	41.8
November 2007	119	260	15366	59.1	45.8
December 2007	184	435	25150	57.8	42.3
January 2008	149	405	24179	59.7	36.8
February 2008	118	339	19412	57.3	34.8
March 2008	148	442	24891	56.3	33.5
April 2008	146	405	20667	51.0	36.0
May 2008	226	527	25298	48.0	42.9
June 2008	146	549	27223	49.6	26.6

From Table 2, it is easy to calculate that the number of checklists made between July and December 2007 (and received by 31 July 2008) was 1579 (263 checklists per month); the number of checklists made in the first six months of 2008 (and received by 31 July) was 2667 (445 checklists per month). There are probably still a few checklists from 2007 waiting to be submitted, but there will be many checklists from 2008, especially from June. So the difference between the first six months of SABAP2 and the second six months will ultimately be even more striking.

The first time the project got more than 400 checklists in a month was in December 2007 (435 checklists) and this level has been reached in every subsequent month, except February (339 checklists) (Table 2). By 31 July, May had reached 527 checklists and June had received 549.

So progress has been stepwise, with the first big step up in December, followed by another step up in May.

3. Does the number of species on a checklist vary seasonally?

Table 1 shows that the overall number of species per checklist was 55.6 species, about six more than the value attained per quarter degree grid cell during SABAP1, in spite of the fact that pentads are one/ninth the size of quarter degree grid cells. In Table 2, it is clear from the column headed “records/checklist” how the number of species per checklist varied seasonally. On average, winter checklists were around 49 species, about 10 species shorter than those made during the summer months, when the number of species was around 59.

4. What was the balance between breadth and depth?

Table 2 shows that the proportion of checklists which are for new pentads has steadily decreased. In the early months, when little atlasing had been done, most checklists were for new pentads. From January to April it averaged 36%. Then it jumped up to 43% for May (probably because the extra-long long weekend enabled atlasers to travel to unatlased areas), and slipped down to 27% in June.

In spite of the decreasing proportions of checklists from new pentads, the number of new pentads covered per month remained fairly stable, at about 150. This happened because of the increase in the number of checklists per month.

At the end of the first year, there was an average of 2.4 checklists per pentad which had been covered. 41% of covered pentads had at least two checklists. The pentad with the most checklists was near Phalaborwa in Limpopo Province, and 44 checklists had been made for this pentad. We would like to see lots more pentads with this depth of coverage.

3. Where does SABAP2 hope to be in about six months time, say the end of the summer holidays in January 2009?

There are five SABAP2 targets on the website, and these are updated daily:

1. Currently, our first target is to get at least one pentad in every half degree grid cell done by the end of January 2009. **We were at 64.6% on 1 July, almost two-thirds of the way there.** The hardest region in which to meet this target is going to be the Northern Cape, and this is going to be a tough target.
2. Our second target is ultimately to get at least one pentad covered in every one of the 2028 quarter degree grid cells in the SABAP2 area. **We were at 33.6% on 1 July, which is one-third of the way there.** We should try to get this figure to 50% by January 2009.

3. Our third target is get at least one third of the pentads covered in 75% of the quarter degree grid cells. **On 1 July, we were 17.4% of the way to this target**. We should try to get this to 40% by January 2009.
4. Our fourth target is to get more than one checklist for 80% of the pentads which are covered. **On 1 July, we were at 41%, about half way there – this target goes down as pentads receive their first coverage, and up when pentads receive second, third, …, checklists – it has hovered around 40% since 3 April.** We should try to get this to 50% by January 2009.
5. Our fifth target is to get eight or more checklists for 25% of the pentads which are covered. **We were at 5.21% on 1 July, i.e. just over 20% of the way to this target.** We should try to get this to 10% by the end of January 2009.

Targets 1–3 are breadth targets, Targets 4–5 are depth targets. Note that the fourth and fifth targets have denominators that increase as pentads get done, so the target values decrease as well as increase.

Where is the longest "caterpillar" and where is the largest "carpet"?

A caterpillar is a transect of atlased pentads, such that you can go continuous from one to the next; crossing over corners is allowed. By the end of June 2008, the longest caterpillar was in the Western Cape, from Kommetjie to Grootvadersbosch, and stretched for 31 pentads. Gaps in strings of atlased pentads frequently represent pentads that require some special ingenuity to access. Strings of atlased pentads will assist in any interpolation that ultimately needs to performed on the data.

A carpet is a rectangle of atlased pentads, without any holes. These are particularly important across urban, suburban and peri-urban areas. In the first year of SABAP2, the largest carpet was in northern Gauteng, with corners in North-West and Mpumalanga. It stretched 11 pentads from east to west, and six pentads from north to south, and covered 66 pentads.

At the start of the second year of SABAP2, what are the main problems, and how will they be fixed?

The main problem is undoubtedly coverage of the Northern Cape. Although atlasers can help a lot, to get coverage for this huge region, which covers nearly 30% of the atlas region, we are going to need to employ someone to help with this. SANBI is providing some additional budget to enable us to make an appointment.

There are a whole lot of smaller gaps in coverage, in many different areas. Most of these will need to be dealt with by the ingenuity of the atlasing community: long weekend trips and atlasing expeditions (both of which could be a lot of fun), and persuading the bird clubs to sponsor atlasing to “crisis” regions, etc.

Another issue is that so much depends on so few. It would be great if the team of experienced atlasers and regular contributors to the project increased in size. Besides promoting the project to as many birders as we can, we are encouraging all existing atlasers to contribute as much to the project as their varied situations and circumstances allow them to do.

What were the highlights of the first year of SABAP2?

There are two striking differences between SABAP1 and SABAP2. Firstly, SABAP1 started off with a fair blaze of publicity, at a time when volunteer projects of this nature were novel – as a result it was almost overwhelmed with participants. But there was a huge attrition of volunteers, and at the end of the day SABAP1 was in fact carried by a relatively small number of observers. SABAP2 is working the opposite way; starting off with a small pool of enthusiastic participants, and steadily expanding their numbers. Secondly, SABAP1 volunteers were largely based in the cities. SABAP2 is remarkable for the number of observers based in rural areas, and covered the areas around their home bases. With the exception of the Northern Cape, the geographical spread of observers is much more even with SABAP2. The most striking highlight of SABAP2 has been the breadth of coverage.

When will SABAP2 stop?

The current funding runs to the end of 2009. The SABAP2 Steering Committee has recommended that the project will need to continue for an additional two years to achieve adequate coverage, both in depth and breadth. So we should plan to continue atlasing at least until the end of 2011.

Would it be useful to continue atlasing indefinitely?

This would be the first prize. This would enable us to monitor continuously in space and time. Range expansions and contractions would be apparent as soon as they occurred.

If we could achieve this, we could also avoid the withdrawal symptoms that marked the completion of SABAP1.