

A calendar of windpumps



*We wish our friends, colleagues
and clients a prosperous 2007*

Parsons & Associates
specialist groundwater consultants



info@pasgc.co.za

*Wherever you go, you see them;
whenever you see them they go*

Tel: (021) 855-2480

James Walton (1998)



National symbol

One only has to drive along our roads - be they national highways or gravel roads in remote parts of South Africa - to realise how important windpumps are to the economy of our country. It is unusual to travel for more than a kilometre or two without seeing a windpump on the horizon. This is particularly true in the drier western parts of our country where rainfall is low and surface water resources absent. Groundwater is often the only option. In contrast to ugly and invasive telephone lines, cellphone masts and electrical pylons, "steel flowers" form an integral part of the landscape - symbolising the importance of water for life.

January 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
	New Year's Day					
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			





Pioneering technology

Farm names bear testimony to why people settled where they did - water. Names such as Mooifontein, Diepfontein, Rietfontein and Matjiesfontein illustrate farms and settlements establishing themselves around natural sources of potable water. The introduction of windpumps in the 1840s to lift water allowed farmers to settle away from springs and rivers. This facilitated the expansion of farming and settlement into areas in which water was previously not available. Little credit is given to the simple technology that harnesses the energy of the wind to lift water for its profound role in the growth and development of this country.

February 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			





Urban ornament

Many of us take it for granted clean water will gush from our taps when we open them. Reticulated water supplies in urban areas have done away with the need for windpumps in towns and cities, relegating them to colourful ornaments such as this one in Napier. However, in many small towns and villages in the dry western parts of South Africa windpumps continue to be used to supply water for domestic and gardening purposes. The Fred Turner Museum in Loeriesfontein has a unique collection of windpumps, celebrating improvements in design from the early wooden structures to the all-steel structures prevalent today.

March 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
			Human Right's Day			
25	26	27	28	29	30	31





A legend lives on

Located midway between the Castle and Hottentots Holland, the farm "Meerlust" became an overnight station for early settlers ferrying produce in the Cape Colony, and the hospitality of the Myburgh family became legendary. In time, the farm also became synonymous with quality wines, with the Meerlust Rubicon remaining an icon today. Their windpump - situated in the middle of the farm dam - must be one of the most photographed windpumps anywhere in the world. While the picture conjures up images of vast underground lakes, groundwater is not as mythical as generally perceived. Groundwater is subject to the laws of physics, and is predictable and understood when properly studied.

April 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6 <i>Good Friday</i>	7
8	9 <i>Family Day</i>	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27 <i>Freedom Day</i>	28
29	30					





Enduring tool

The principle of using wind to lift water has been used in South Africa for over 150 years. As technology to harness energy from the sun improves, it is expected windpumps could gradually be replaced with solar pumps. Both harness natural and renewable energy to provide one of the three essential ingredients for life - water. The Kgalagadi Transfrontier Park, for example, has embarked on a programme that will result in sights like these becoming a thing of the past. Windpumps are gradually being replaced with solar pumps. Windpumps have served the area well since the first boreholes were drilled in 1914 to supply water to troops station along the Namibian border.

May 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
		Worker's Day				
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		





What's in a name?

Windpumps are often incorrectly called windmills. It stands to reason that windpumps pump; and windmills mill. While it might be considered by some to be pedantic to worry about terminology, it is crucial we have a common understanding of the language we use. This is particularly important when dealing with scientific concepts in a multi-disciplinary environment such as hydrology. Different usage of the term baseflow by surface water hydrologists and geohydrologists, for example, has contributed to a poor understanding of surface - groundwater interaction.

June 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
						Youth Day
17	18	19	20	21	22	23
24	25	26	27	28	29	30





Sign of the times

Derelict windpumps litter our landscape, often reflecting harsh conditions farmers have to face. Drought, rising costs and importation of cheaper meat have made extensive stock farming unattractive; and contributed to farmers leaving their land in search of better prospects elsewhere. Lack of maintenance and a continual battering by the elements result in windpumps slowly disintegrating. These forlorn structures also represent a shift to more convenient diesel or electrical powered pumps that pump larger volumes of groundwater.

July 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				





Art and deception

Windpumps are widely used in the media to create a country feeling - a sense of quiet and simplicity - and as a symbol of reliability. They commonly feature in adverts promoting anything from cars to restaurants, guests houses and rural housing estates. Windpumps have even been used in the promotion of a koeksuster festival in Oranje! However, dressing up the cellphone mast outside Riversdale to look like a windpump must be the most original of them all.

August 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9 <i>National Woman's Day</i>	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	





Source of hope

The Pella Mission Station was established in 1814 and provided sanctuary for Khoisan driven out of Namibia. A church was built next to a spring by two men using an encyclopaedia as their building manual, taking them 7 yrs to complete. The station was abandoned in 1872 because of drought, but was reopened in 1878. Today, a windpump stands proud in the date orchards, providing much needed water to a community that has made Pella dates famous across the country. It remains ironic that so many people face hardship daily because of a lack of water, yet metres below their feet is an untapped source of water.

September 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
	Heritage Day					
30						





Old tricks

Farmers have known for decades to establish windpumps next to small farm dams. Seepage from the dam into the subsurface ensures the supply from the windpump remains reliable, even in unfavourable conditions. This technique of artificial recharging aquifers is also used on a larger scale to improve the sustainability of groundwater supply scheme, store excess water until needed without enduring evaporation losses, replenishing overused aquifers and preventing saline intrusion. Artificial recharge has been used with great success at Atlantis, Polokwane and Windhoek, and a number of schemes are now being investigated elsewhere in the country.

October 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			





Sense of belonging

What would a stock farm be without a windpump? Besides being an integral part of any stock farm in the Kalahari and Karoo, windpumps have a sense of belonging. Like bread and butter, table and chair, salt and pepper and Jack and Jill; stock farming and windpumps belong together. Much research is done on optimal farm layout and erosion around watering points, but we don't even know how much groundwater is typically abstracted by a windpump. This illustrates the degree to which we take them for granted. Is it not strange we invest more in exploring for gold and diamonds than we do in developing and protecting a resource we can't live without?

November 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	





A setting sun

As the sun sets on another day, the job of the windpump is never done. Waiting for the next puff of wind, she stands sentry over those dependent on her for their next sip of water. With a little love and care, she will continue to serve them well. In spite of technological advances in the design and construction of pumps, windpumps remain an important tool for harnessing groundwater in rural areas. Their independence from electricity and track record of reliability suggest the steel flower will adorn our landscapes for decades to come.

December 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
Day of Reconciliation	Public Holiday					
23	24	25	26	27	28	29
		Christmas Day	Day of Goodwill			
30	31					

