

## **QUESTIONS to Richard Hall**

Why did you build and establish Stonehenge Aotearoa?

We (Kay and I) use to run astronomy courses and lectures at the Carter Observatory (now Space Place) in Wellington. The programs included ancient astronomy and we found that people were absolutely fascinated by stone circles and pyramids. So, we said that if we ever had the opportunity, we would build a stone circle so that people could see how these ancient technologies worked. That opportunity came about when the Ministry of Research, Science and Technology offered to fund projects that would involve the ordinary person in knowledge and learning. The Royal Society of New Zealand was given the task of selection and supervision. We put forward the plans to build a working Stonehenge which were approved by RSNZ.

I understand you founded it with your wife Kay.

The project was planned and organized by myself and Kay (who is now my wife). I was president of the Phoenix Society and Kay was the treasurer. However, other members of the Society also played a major role in its construction. For example, Bob Adams put well over a thousand hours into the surveying of the site and the positioning of the stones.

You mentioned you'd previously worked at Carter Observatory in Wellington. For how long?

Full time, I worked there for more than 5 years... part time for many years before that.. I was the Senior Public Programs Officer and, in addition to organizing staff and programs, I produced planetarium shows and ran lecture courses and observing evenings for the public. It was here that I met Kay, who was an Education Officer.

And did you ever touch on astrology as well as astronomy?

Not at Carter Observatory. Everything had to be strictly science. However, Kay and I did a vast amount of research into Maori Astronomy (which includes navigation and astrology). This resulted in the first book that we wrote, "Work of the Gods". Having worked on ancient Maori beliefs and discovering the way in which knowledge was encoded in symbols and legends I was able to find exactly the same process, when looking at Celtic and other ancient writings. Essentially, astrology was our ancestors' attempt to understand and discover the meanings of the universe around them.

Did you ever get questions from people about their sun signs and the zodiac? And if yes, can you please give some examples of the type of questions people asked?

At Stonehenge Aotearoa we get lots. At the center of the Henge is an obelisk. Near noon, on a sunny day, the obelisk casts a shadow on a structure on the ground called an Analemma. As the shadow falls upon the analemma it can be read to give the date and the length of the day, which varies throughout the year. The shadow also shows where the sun is amongst the stars and the zodiacal sign it is moving through. In astrology, where the shadow falls, identifies the star sign of people born on that date. Visitors to Stonehenge Aotearoa are usually surprised to discover that their star sign is not that given in newspapers and popular magazines. On guided tours we spend a lot of time working out peoples' true star sign and explaining their ancient meanings. We have had so much interest and so many questions about the zodiacal signs that we ended up writing another book: "THE ZODIAC: Myths & Legends of the Stars".

How did you first get into this line of work? What is your personal fascination or relationship with the stars/galaxy?

Ever since my mother took me to the Natural History Museum in London and I (a child) encountered the skeleton of a Diplodocus (97 feet long) I have been fascinated with time, space and the unknown. The Universe is so vast that just about anything that we can imagine is out there somewhere.

Here and in England, I used to work in the field of electrical engineering. Astronomy, along with paleontology and history were my interests and hobbies. I built observatories and gave lectures. I used to do a lot of public talks at Carter Observatory and, over time, they asked me to do more and more. Eventually, I had to say to them that I couldn't increase what I was doing for them unless they employed me... which they did.

Can you explain archeo-astronomy, which is what you do at Stonehenge Aotearoa?

Archeo-astronomy is the ancient knowledge, beliefs, and use of the stars for navigation, time-keeping and portents. It is the process of using astronomy as an archeological tool.

How was Stonehenge Aotearoa adapted to New Zealand conditions when compared to the original Stonehenge in the northern hemisphere?

'Stonehenge' is a generic name for stone circles that have lintels. In addition to the one in England there is one in Russia and another in Bulgaria. There are, however, hundreds of stone circles throughout Europe, Africa and Asia. Each is unique, because each has to be designed for its precise position on the Earth and the surrounding topography. Our guided tours explain how and why the alignments of Stonehenge Aotearoa are designed for its precise location in the Wairarapa, New Zealand

How is astronomy/position of the stars different in the southern hemisphere from the northern hemisphere?

The positions of the stars on the celestial globe remain the same. However, the constellations in the southern hemisphere appear upside-down compared to how they are seen in the north. In addition, the altitude of the paths of stars will depend upon the observer's latitude.

Do you ever cross over into the topic of astrology on your tours of Stonehenge Aotearoa?

Yes, we explore the beliefs from antiquity that formed the foundation of civilization. Ancient astrology was a way of compiling knowledge like an index. That knowledge was essential for survival. It bears little resemblance to modern astrology.

I've read theories about the purpose of Stonehenge that include that it was designed as a celestial observatory to allow the prediction of eclipses, solstices, equinoxes and other significant events. Do you ever celebrate the solstice or equinox at Stonehenge Aotearoa? And if yes, how do you celebrate them? And why, celebrate them – why are they significant?

Heel stones and other structures at Stonehenge Aotearoa predict and identify the times of the solstices and equinoxes. These events mark the change of seasons and, in the ancient world, a change in the tasks of the people... when to sail, when to plant, when to harvest, etc. Major religious festivals around the world are identified with the solstices, and equinoxes. For example, in the northern hemisphere, Easter was originally the festival of the Spring Equinox, Christmas was the Winter Solstice.

We always provide special programs at the times of the Solstices and Equinoxes that explore the ancient meanings of these festivals. Visitors can, like their ancestors, observe the sun setting on the dedicated stone pillars. The standard programme, is a presentation followed by watching the sun set over the appropriate heelstone. On occasion there may be a special ceremony performed by druids or other spiritual groups. At other times we are joined by musicians, students dancing or singing groups and sometimes we include stargazing by laser light.

Do people visit Stonehenge Aotearoa seeking answers to spiritual questions or for a spiritual experience?

Yes they do and it includes people from many different faiths. You would need to ask them what experience they are seeking.

If yes, why do you think this is, and do you have examples of the type of experiences people hope to have?

The Henge has many special properties including amazing acoustic effects. It is also very peaceful and the pillars and lintels frame the various views of the countryside. Sometimes, groups of people meditate or pray together, sometimes we see them sitting in circles. Some people tell me that they experience a strong spiritual presence when they enter the Circle.

Have you had any interesting experiences yourselves since building Stonehenge that you can share?

Yes... but you would need to be in the stone circle for me to show and explain what happened. Come and see and experience it for yourself.