

HUMAN POWER

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*Special note for this issue

This is the last issue of *Human Power* produced on behalf of the IHPVA. Future issues will be entirely by and for the HPVA. Please send contributions and comments for the next issue of *Human Power* to the HPVA. The IHPVA may endorse future electronic human power journals which become available on the internet and are mostly freely available for everybody. Any information about this will be available at www.ihpva.org.

FROM THE EDITOR

This issue of *Human Power* marks an end, a beginning, and transitions. Jean Anderson, who had produced *Human Power* for many years, retired from most HPV duties with the last issue. Jean had worked in almost every position the IHPVA and the HPVA had to offer and we are grateful for her great amount of work for so long. Jean remains physically active and rides her recumbent trike in San Luis Obispo and elsewhere.

This is my last issue of *Human Power*. I want to help start an electronic publication called *Human Power International*

Journal, which will be freely available to everybody with internet access. The publisher will be the newly formed Human Power Institute (HuPI) described in this issue. The HPVA will however also continue to print *Human Power* and has several offers from potential new editors to choose from.

Why this new development? The traditional human-powered vehicle movement has matured but is in danger of stagnation. With so many splendid achievements having been accomplished on land, water and in the air, the pioneering spirit has diminished. With so many excellent HPVs and HPBs available commercially, the interest in home construction has all but vanished, and with regular HPV races being organized in many countries, the original spirit of rebellion against established sports bodies is past, indeed we have become established sports bodies ourselves.

What about the environmental side of the human power movement? There are some positive developments in western countries which have by now at least realized the problems of over-motorization, even if most aren't doing anything about it. Improvements are the increase in pedestrian areas and the introduction of pedicabs or velotaxis in some western cities. In Switzerland so-called "Low-Speed Vehicles" (LV, i.e. walking, cycling, and HPVs) have been officially recognized as a traffic category worthy of promotion by government funds. In contrast, the mayors of many large Chinese cities regard HPVs of all types as backward and are promoting motor vehicles and beginning to ban cyclists from major streets. The developing countries seem intent on repeating northern-western mistakes and regarding money and consumerism more highly than a high quality of life or indeed life itself.

With the globalization of information it is now possible - and necessary - to shorten the dark "oil age" for the developing countries. To this end, the information we have to offer must be available worldwide on the internet.

It must also be available freely, especially as differences in earning power vary enormously worldwide. Freedom of information promotes its propagation, as is shown by the presently largest common project of global human society: the GNU/Linux computer operating system with free and open source software.

Also of interest to readers will be former editor Dave Wilson's project to make

available the archive of all past issues of *Human Power* on a CD-ROM and on the internet, complete with a searchable index. Dave and the founding members of the Human Power Institute have been hard at work at assembling and indexing the issues. The CD-ROMs should be available presently from the HPVA and other IHPVA members.

Several readers wrote regarding the editorials in HP54 which commented the connection between HPVs, oil and the Iraqi wars. One reader supported the war and three the reasoning in the editorials. All stressed the importance of the upcoming elections later this year in the USA, which have far-reaching consequences for the USA and for the whole world.

Besides choices like between right and might, freedom and deception, education and armaments, I feel it is of utmost importance to ratify the Kyoto Protocol for limiting greenhouse gases, which still requires the signature of Russia or the USA. The good news is: most readers of *Human Power* can do a lot about it: ride HPVs more and drive less, telecommunicate more and fly less, and above all: *go and vote in November*: it has never been so important!

Also in this issue...

The main theme is the efficiency of human and mechanical drive trains. We have a continuation of Danny Too's work with his and Gerald Landwer's article "Biomechanics of HPV" Part 2.

Iain Crouch's article on the optimization of gearing for an automatic bicycle reaches a similar conclusion: you have to get the operating points of both the human engine and the mechanical gearing system right.

Rohloff are also concerned about the right gear in their article on hub gear efficiency. This is however mainly a criticism on Kyle's and Berto's previous efficiency measurements, including lots of new measurement data of the 14 speed Rohloff hub gear.

Vernon Forbes rounds up this subject with his "Elegy for Sturme Archer", a fascinating combination of intimate hub gear details, recent industrial history, and moral indignation of the present harsh industrial climate which shifts jobs overseas just as easily as goods.

Finally, we have Bill Patterson's proposal for a new scoring system for human-powered helicopters and a success story describing a fleet of Philip Thiel's "Escargot" human-powered houseboats.