

Getting the green light

NOT ALL "energy efficient" light bulbs are created equal, according to a report carried out by independent energy consultants. Tests have shown that some use more current (amps) than others.

It appears the fluorescent light bulbs promoted by David Bellamy on behalf of Electricorp Marketing are in the "less than totally green" category.

Chalkline Energy Consultants, a UK-based company, have singled out bulbs with electro-magnetic ballasts as the worst culprits – the type that David Bellamy is touting. These bulbs have lower power consumption than incandescents but their power factors are between 0.23 and 0.5. Ideally an appliance should have a power factor of 1, meaning that it is 100 percent efficient at converting mains power to light.

On the other hand, suppliers have advised that bulbs recently advertised through *Forest & Bird* have a higher power factor of 0.95 because they convert the mains current using an electronic circuit rather than an electro-magnetic ballast. 🦋

Source: *New Scientist*

The bulb in David Bellamy's left hand might be greener than the incandescent, but it still can't beat the latest in energy efficient bulbs sold in Forest and Bird's shop (inset).



Upping the insect image

A WINGLESS FLY that rides around on bats, a giant centipede as long as a human foot and a solar-powered fly are some of the rare and endangered New Zealand insects portrayed in a new book called *Forgotten Fauna*.

Author and scientist Mike Meads of DSIR Land Resources says many of New Zealand's insects are as rare and endangered as the more well known birdlife such as the black robin and the kakapo.

He calls in the book for a new conservation effort to be launched for invertebrates to ensure the future survival of "these incredible forgotten fauna".

Invertebrates make up more than 80 per cent of living organisms on earth. Life could not exist without them. They carry out the recycling task of shredding, composting and returning to the soil as nutrients the leaves from all the world's plants.

"Humans need invertebrates though they don't need us," Mr Meads says.

Insects suffer from a bad press, because of the anti-social activities of a few of their number, he says.

For example the endangered and docile giant wetas are tarnished by the common tree weta's reputation for biting and kicking.

The public perceives insects to be agricultural pests or stinging, biting nuisances



Mike Meads

which can spread disease. But most invertebrates are harmless, he says.

Among the many rarities in the book is a fly without wings. It has no close relative in the world. This blind bat fly lives in a very specialised habitat – the guano of the roosts of short-tailed bats.

The wingless fly rides on the bat only when seeking new roosts. The fly can make a noise like a dentist's drill to prevent it being eaten by bats.

The book also contains the only known photo of what is thought to be the world's rarest fly – the batwinged cannibal fly. It is found in the cool Fiordland mountains.

The batwinged fly holds its big black wings open in the sun to raise its body temperature before flying down to seize other flying insects.

Another of this country's strange creatures is the giant centipede which can grow up to 25 cm long. This efficient predator can poison and kill small lizards.

New Zealand has one of the richest land snail faunas in the world, Mr Meads says. They occupy most niches from sea level to the mountaintops – anywhere there is a trace of vegetation.

Forgotten Fauna (\$19.95) contains colour photos and descriptions of 45 rare, endangered and protected invertebrates. More than half of the insects in the book have never had photographs of them published before. 🦋