Errata in Bicycling Science fourth edition

Basal Metabolism

Page 82:

...The Mifflin-St. Jeor equation gives BMR in kilocalories per day as (10 × weight in kilograms) + (0.0625 × height in meters) − (5 × age in years) + 5 (for men) or – 161 (for women). should be … (625 × height in meters) ...

Pure-Gravity Records

Page 139:

The root symbol should include *h* and *g*
...The end-speed of a frictionless fall would be $v = \sqrt{2\ h\ g}$ or slightly over 34 m/s (~123 km/h ~76 mph)...

Gravity-Tolerated or -Assisted Records

Page 142:

...a much lower *average* speed at 27.6 km/h, but of course a much... should be

...a much lower *average* speed at 29.3 km/h, but of course a much...

Air Resistance

Page 173:
... whereas more rounded bodies like a sphere or a pointed cone experience only about half the drag for the same cross section *A* (see also figure 5.8)... should be

... whereas more rounded bodies like a sphere or a pointed cone experience only about half the drag for the same cross section *A* (see also figure 5.9)...

Airfoil Sections for Struts and Fairings

Page 229:
... improvement in the drag coefficient C_DAnd make C_D values higher... should be:

... improvement in the drag coefficient C_D and make C_D values higher...

Hull Efficiency

Page 503:

...Or if the human ”engine” is treated as a fuel cell with 20 percent efficiency and a basic metabolic rate of 450 W (food) input is subtracted, an energy-cost L/D ratio greater than 200:1 is still attained (see figure 10.25)... should be:

...Or if the human ”engine” is treated as a fuel cell with 25 percent efficiency and a basic metabolic rate of 100 W (food) input is included, an energy-cost L/D ratio greater than 300:1 is still attained

(see figure 10.25)...
Figure 10.25 has therefore also changed slightly. See the new one in the spreadsheet https://hupi.org/BS4/Spreadsheets/Fig10.25(Drag2withL2D)new.ods and in the caption

... (pulled from land with a rope or winched) at 500 W (2,500 W food input). should be:

... (pulled from land with a rope or winched) at 500 W (2,100 W food input).

Human-Powered Submarines

Page 507:
... Historically, human-powered naval submarines were built as pressure vessels containing air. The very first such submersible, the famous Turtle of 1775, was powered by one man... should be:

... Historically, human-powered naval submarines were built as pressure vessels containing air. The famous Turtle of 1775 was powered by one man. ...

Background: The first such submersible was the Falconet-Ship of 1772, designed by Jakob Praetorius, apparently a smaller version of his never constructed Steinhuder Hecht. It was human-powered by means of an apparently ineffective vertical fin, a single 12-minute submersal being recorded.

> Erich Grasdorf: „Laengst praemeditiret und kein flüchtiger Gedancke“ - Vom ersten Unterseeboot, 1762 für den Siebenjährigen Kreig ersonnen und 1772 als Muskelkraftfahrzeug gebaut. Die Weltwoche Nr. 49, 3. December 1992.
> Timm Weski: Hippopotame and Schaumburger or Steinhuder Hecht. An Amphibious Craft and a Submarine from the 18th century. The Mariner’s Mirror 88, 2002, 271 – 284.

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Page 551:
Missing entry: Suspension, 182-187