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Full of Life

Springtime is upon us, and the underlying theme for this issue – life – essentially suggested itself. Life pulsing through the veins of people, of animals seeking mates, and in the sap of plants as their first leaves emerge. In our opening pages (p. 4) we write about the tricks and strategies male and female birds employ in their “marital” (and “extra-marital”) affairs. But spring fever doesn’t just affect birds – humans too find their hormones roused. And so, we also decided to take a discreet peek at just what goes on behind bedroom doors in Poland, to see how traditional **sexual customs** are holding out against the “Western” lifestyle (p. 25).

Such amorous games, of course, often naturally lead to pregnancy. Using modern **prenatal diagnostics** (p. 12), doctors are able to detect human fetal defects at a very early stage. Sometimes treatment, even including complex surgery, can begin while a child is still in the womb! But the question arises: might modern society, focused on the capabilities of modern medicine and biotechnology, lose sight of human dignity and the sanctity of human life? Such doubts are addressed in the commentary **Ethics in the Genomic Era** (p. 50).

Life is also in full swing among the plant kingdom. On p. 20 take a look at efforts to study and maintain its extraordinary diversity in the article **Nature’s Vast Variety**. Moreover, the impressive landscaping at Versailles or even Warsaw’s Wilanów (p. 8) show how the lush natural world can be incorporated as an element into **manmade gardens**.

Since all living things are based on molecules of carbon, on p. 16 we describe the remarkable properties of some recently discovered forms of this crucial element, called “fullerenes” and “nanotubes.” Indeed, the secrets of carbon are something the scientists of the PAN **Institute of Coal Chemistry** are also working hard to unlock (p. 48).

Another of the fundamental traits of life is communication: ranging from the simplest chemical signals exchanged by single-cell organisms, up to refined human language. Yet not everyone copes with verbal communication equally well, and as recently as in the 18th century deaf individuals were relegated to the fringes of society. Nowadays they are fully-fledged members, constituting a kind of linguistic minority using complex and intriguing sign languages, including **Polish Sign Language** described on p. 33.

Our issue closes, as usual, with a **Gallery** photo (p. 51), where we spotlight a certain form of life that has given biologists headaches over the years. It has been classified as a plant, a fungus, to finally end up being declared an animal!

ACADEMIA staff



Jerzy Zembruski

Spring has sprung! Life is on the move! What better theme for this issue?