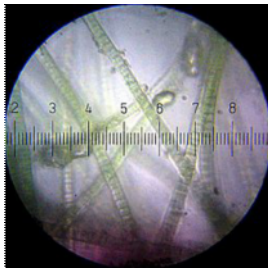


FUNGI, BLUE-GREEN ALGAE, ALGAE, LICHENS, BRYOPHYTES, FERNS – DO YOU KNOW THE DIFFERENCE? ...Neil Tucker

As a child, one of the first things you learn about the natural world is the difference between plants and animals – plants photosynthesize to produce carbohydrates, especially sugars, and animals consume the plants to break the carbohydrates down again to obtain the energy contained. Animals are mobile whereas plants are rooted to the spot. In scientific terms, plants and animals are classified as being in separate ‘kingdoms’, named Plantae and Animalia respectively. But there are other organisms that don’t belong to either of these two kingdoms. Welcome to the world of the small, where everything is weird. The plant and animal kingdoms don’t just merge; they are whole new kingdoms!

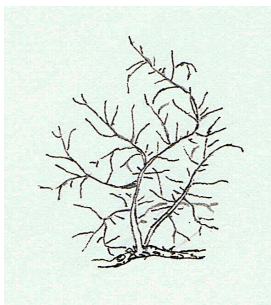
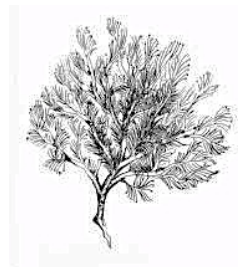
This article is a brief introduction; over the coming months we will have articles on each of the following groups.

Fungi belong to a large group of organisms that includes microorganisms, such as yeasts and moulds, as well as the more familiar mushrooms. The fungi are classified as a separate kingdom from those of plants and animals, although genetic studies have shown that fungi are more closely related to animals than to plants.



Blue-green Algae used to be classified with the algae, but now, are considered closer to bacteria. They are the simplest and oldest of living organisms.

Algae span the gap between these simple organisms and plants with which we are more familiar. They are photosynthetic, like plants, but lack the many distinct organs found in land plants. There is great variation in structure and lifestyle – some are single-celled organisms in pond water, others can be metres long, e.g. Giant Kelp (all seaweeds are algae).



Lichens are currently classified as fungi that have captured algae or blue-green algae, and incorporated them, to provide them with photosynthetic products. In return, the algae obtain protection. The fungi are now so dependent on the algae that they are unable to survive in the field without them, although the algae can. This arrangement is similar to that in corals.

Bryophytes include the mosses, liverworts and hornworts. They appear to be the closest living relatives of the vascular plants. Bryophytes are all land plants that are non-vascular, i.e. they have tissues and enclosed reproductive systems, but they lack vascular tissue that circulates liquids. They have neither flowers nor seeds, reproducing via spores.



Ferns are firmly in the plant kingdom, having most of the features with which we are familiar, but reproduction is still by spores rather than by flowers & seeds.

Source: *Wikipedia* & others

Copyright

Any article or information appearing in this *Newsletter* may be copied for further interest in the conservation of native flora and fauna or in environmental care, provided that the source and contributor(s) are acknowledged.