



Spectacular Rural Valley in Gozo

Malta's First Rains

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SENIOR LECTURER AT ITS

Countryside walking and hiking have always been a favourite pastime of both locals and tourists, but during the COVID years they became even more popular as countries closed their borders and many locals turned inwards, deciding to explore Malta's beautiful countryside, coastline and valleys.

The increase in importance of countryside and nature walks across the Maltese islands presents an added attraction to tourists particularly during the Spring Season when the countryside is in full bloom with an amazing variety of flowers and abuzz with all kind of fauna. If properly marketed, it could be used to entice tourists to visit Malta during the shoulder months.

But the Autumn season can also be very enjoyable and a walk during September and October may be a discouraging experience

if the day is a hot one, but once the rains fall, the Maltese countryside undergoes an astonishing transformation that can be enjoyed by all revealing a completely different facet of our islands.

The best time for a walk is just after the early rains of September or October which help cool down the Maltese countryside and change it from a rocky semi-desert to a verdant carpet. Unfortunately, this year it did not rain until late November probably delaying the growing season by a month or two. But the change is a dramatic one and hills, garigue and valleys transform into stretches of grass and vegetation that are a wake-up call to the local flora and fauna.

In many places, the verdant turf blends beautifully with the long stalks of sea squill poking above the awakening garigue and steppe areas. The white, handsome multi-flowered stalks are one of the few

plants that flowers in summer and their appearance spells the end of the hot, dry season.

The first rains also fuel the growth of many animals particularly wild rabbits who thrive on thick fast-growing vegetation. Wild rabbits reproduce in summer and young ones can still be seen in places such as Nigred, Żurrieq, the Għadira Nature Reserve and Buskett. The secret is to find a quiet secluded place during the week and wait for things to happen. If you're lucky you may even catch a glimpse of the weasel (*ballotra*), Malta's largest carnivorous mammal which although small is capable of preying upon larger animals such as rabbits and a variety of lizards, snakes and emerging frogs.

The rich reptilian life found on garigue, steppe-land and forested areas benefits greatly from an early cloudburst. Garigue vegetation provides a valuable food source

to many insects and arachnids on which reptiles like young wall-lizards (*Gremxul*) and geckoes (*Wiżġhat*) that hatch in the summer months feast. The young of the Ocellated Skink (*Xaħmet l-Art*) which are born alive, also partake of this abundance. All grow quickly because of the profusion of invertebrate life including worms, ants, flies, spiders, grasshoppers, earwigs, millipedes and woodlice.

The explosion of life marks the beginning of Autumn which is a particularly interesting season to explore. You don't need to embark upon lengthy walks to glimpse the beauty of nature. In forested areas (parts of Pembroke and the *Foresta* 2000 site at Għadira), newly hatched chameleons can be seen eyeing the plentiful insect life and several bird species will be following suit.

The easiest place to observe insect-eating birds in early Autumn are the short cliffs below the Għar il-Kbir garigue overlooking Buskett and the internal cliffs at *Il-Fawwara* near Slġġiewi. You can reach the place in Buskett by climbing up the side of White Poplar valley (*Wied il-Luq*) where the trees end and the garigue begins. It's an ideal spot to watch birds soaring on thermals over the valley catching butterflies and insects on the wing; particularly the beautifully coloured bee-eaters which tend to flock together and visit Malta as early as September.

Here, colonies of swallows swoop off the garigue's edge and glide over the trees in search of flies and mosquitoes. It is one of the few places where you can sit down in the fields and watch a splendid cannonade of birds fly over you!

A little patience may lead to the spotting an odd flycatcher among the high tree branches where it builds its nest and waits patiently to snare the oblivious butterfly or moth. A small binoculars and a bit of patience can be very rewarding in such places and go a long way in proving that our country is far from the desolate rock many people think it is.

The internal cliffs of *Fawwara* are particularly attractive to birds of prey which take



Painted frogs

advantage of thermals formed over the short internal cliffs due to the winds coming from over the sea. These thermals allow birds of prey such as Black Kites, Eleonora's Falcons and Hobbies to lazily soar about until they detect a reptile, insect or small mammal on which they prey. Then, they plunge down like a living attack airplane to catch their prey on the fly until they leave again on a long journey to warmer climes.

PUDDLES AND PONDS

The first rains fill the heavily eroded limestone surfaces of most garigues with freshwater pools that attract a great deal of animals and insects. It is still early for water-loving plants, but the dragonflies will be having a field day.

The Red-veined and Scarlet darters (*Mazzarel Aħmar u Skarlat*) are the commonest dragonfly species found around freshwater ponds. The Scarlet variety is thinner, but both are almost completely red and have very fragile looking wings. Unlike the Emperor Dragonfly, they like to rest on the tips of water-logged plants that have been partially submerged by the recent rains.

Another frequent visitor is the Emperor Dragonfly (*Mazzarel Sultan*) which can reach a length of 7 cms. At this time of the year, you will see several mating pairs copulating in mid-air or resting on plants in a characteristic M-shape of courtship.

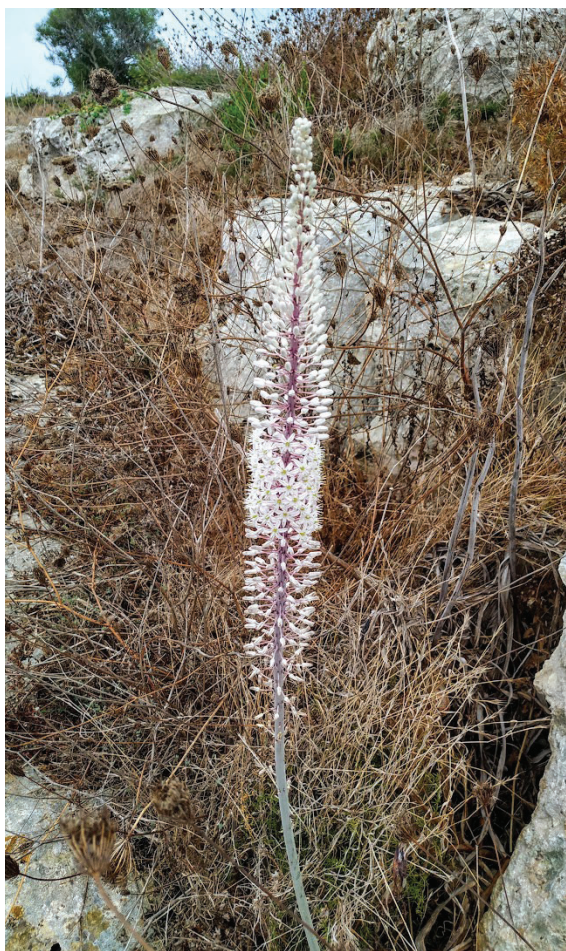
Dragonflies prefer stagnant pools with lots of debris and decaying vegetation where they can lay their eggs; while another group of invertebrates, the freshwater shrimps prefer cleaner waters.

Most garigue ponds have colonies of the fairy shrimp (Gamblu tal-Għadajjar); while the much rarer clam shrimp (Gamblu tal-Qoxra) can be found sporadically in ponds at Nadur and Dwejra, Malta.

Many insects are dependent on water. But if you sit still by a pond with a pair of binoculars you can observe many interesting sights including wasps drinking (*Żnażan*), and hovering mayflies (*Ninfi*) and damselflies (*Dammigelli*) mating over the water.

You do not need to travel far to find a freshwater pond. Many abandoned fields, garigue and steppe-land areas lie just a few metres away from main roads and become waterlogged during the rainy season. Two excellent locations are Tal-Wej in Santa Margerita, Mosta and Wied id-Dis, Għargħur.

Tal-Wej is particularly interesting having large semi-permanent freshwater pools that provide for a variety of aquatic animals and plants, the most important of which is the Tadpole Shrimp. This is the largest freshwater shrimp found on the island and can reach 5cms in length. It is also living



The squill flower



Rare permanent pool

fossil, practically indistinguishable from fossils found 220 million years ago. Like all freshwater fauna, it's numbers are falling due to a decrease in freshwater sources on the island and the contamination of the few remaining permanent pools by fertilisers and pesticides.

These are truly enchanting places that offer spectacular views of nearby valleys (Wied il-Ghasel at Santa Margerita and Wied id-Dis opposite Gharghur) coupled with easy access by bus or by bicycle from Mosta centre.

The secret lies in patient and meticulous observation. You may stare at a freshwater pool for an hour without seeing a single fairy shrimp. Then, along comes a friend and spies a colony. It's just the way you look at the pond. Remember: many creatures blend

well with nature to escape the greedy jaws of predators and you may be fooled as well. Fairy shrimps are much smaller than tadpole shrimps being about a centimetre long with many legs that help it swim around. The tadpole shrimp is five times larger and more robust, and looks like an armoured tadpole. Most of these shrimps eat tiny single-celled animals called protozoa or algae.

The Painted Frog is another animal that starts appearing with the first rains. Many people are surprised that frogs show up in places where there does not seem to be any water. But the frog aestheviates (sleeps) during summer in a protective cocoon of saliva and mud that keeps it moist and alive. As soon as the rain percolates through, the frog emerges ravenous with hunger and starts to feast on the rich insect life available.

In a few areas, another tough customer starts to emerge with the advent of the rainy season. In Baħrija and a few scattered valleys in Malta and Gozo, the endemic freshwater crab (*Il-Qabru*) comes out from its moist burrows to search for food and a mate. Unfortunately, this unique crustacean is becoming rarer and rarer due to the increase in pesticides and fertilizers added to water during crop irrigation, and the general decrease in flowing freshwater due to increasingly dry winter seasons.

The Freshwater crab is an aggressive animal with very strong chelae (pincers) that help it hunt frogs, tadpoles, worms and beetles on which it feeds. Large specimens can reach 10 cm. in diameter and may be unafraid of human beings; another reason why their numbers are decreasing as they are easily

caught; and although they are protected by law, conservation of the species is very poor.

It is truly incredible what a bit of acute observation can unravel. Even a seemingly stretch of rubble-filled, abandoned land will reveal an amazing variety of animals and insects.

Water breathes life into the most barren places, and I have discovered some of the most interesting animal, plant and fungi species in the least places expected including an abandoned field used as a dump and under empty oil-drums, cardboard boxes and fridges and in dripping water collected in a shallow depression that revealed a colony of a scarce primitive plant called the Branched Horsetail (*Equisetum ramosissimum*). This is actually a living fossil and the only living genus of the *Equisetidae* subclass whose ancestors dominated the Paleozoic forests of a 100 million years ago reaching heights of 30m. These fed giant plant-eating dinosaurs such as brachiosaurus and diplodocus.

So, although the environment maybe strewn with alien objects (and debris), sometimes gems can be found because life adapts and colonizes every part of the environment. Unfortunately, until the authorities decide to embark upon a massive educational

campaign and clean-up job, the uninformed public will keep on dumping litter into the countryside, adding the sort of dubious character that unfortunately characterises parts of the more frequented Maltese countryside areas.

BOTANICAL GEMS

Walks during Autumn can be very rewarding botanically as the plant-life also starts germinating and some bulbs actually flower. The Autumn Narcissus (*Narċiż Imwaħħar*),

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the Autumn Buttercup (*Ċfolloq tal-Ħarifa*), the Mediterranean Meadow-Saffron (*Busieq*), the Yellow Throated Crocus (*Zaghfran Selvaġġ*) and the early orchid, Autumn Lady's Tresses (*Ħajja u Mejta tal-Ħarifa*) can all be

found flowering in garigue areas during this time.

The smell of rain and greenery, *petrichor* fills the air during Autumn and has an uplifting effect on the human psyche assaulting the brain with the aromas of nature based on a mixture of ozone, geosmin and plant oils. The latter two will have been concentrating in the soil throughout summer, while early storms will have ionized the oxygen in the air creating a higher concentration of ozone. The mixture of all these chemicals produces the characteristic smell of humid nature and prepares us for the onset of winter.

The Carob Tree is also preparing to flower and after the first rains, I really enjoy the sweet earthy smell of water soaked carob which elicits feelings of the beginning of the most fecund months on the Maltese Islands and signals a transformation that is magical and invites everywhere to partake of it's short-lived beauty.

This is facet of Malta should be marketed if we really want to attract higher quality tourists to Malta's rural areas and diversify the tourism product by introducing more sustainable forms that incorporate protecting and conserving the Maltese countryside which is filled with spectacular scenery and rich biodiversity that once lost will vanish forever.