



BULB LOG 03.....16th January 2019





Responding to the mild winter conditions the shoots of many plants continue to grow, pushing through the carpet of fallen leaves. While I am happy to allow the leaves to form a natural mulch on some beds, in others I prefer to lift them using a leaf-vac that shreds and collects them in a bag. With care it is possible to lift the leaves without harming any of the emerging growths and then I immediately return the shredded leaves back as a mulch.

You may well wonder why I bother but when the whole leaves get wet they can form a tough laminated carpet that strong pointed shoots are capable of penetrating but many bent shoots and newly germinating seed cannot.



These germinating **Eranthis** seeds can have difficulty in forcing their way through layers of wet leaves.



Leaf – vac



Heap of shredded leaves.

I tip them back on the bed and then spread them out as a mulch which all the shoots and seedlings are able to push through.

When shredded the leaves can no longer form that tough laminated layer, plus, chopped up like this they break down quicker to feed the soil.



Shredded leaf mulch spread out.



The decision of when, or even if, to cut off last year's still healthy attractive green leaves on such plants as hellebores and ferns is one I make depending on the growth of the subject and the surrounding plants. I like to enjoy the decoration of these winter green plants for as long as possible and they provide habitat for the garden wild life as I regularly watch the small birds foraging among their foliage but I have to balance that with the fact that they are competition to their new emerging growth plus that of other surrounding plants for space and light.

The bed looks bare without the fern fronds and hellebore leaves but the ground will soon be full of the emerging leaves and flowers of Galanthus and Eranthis.



These beds are now ready for the waves of spring colour.



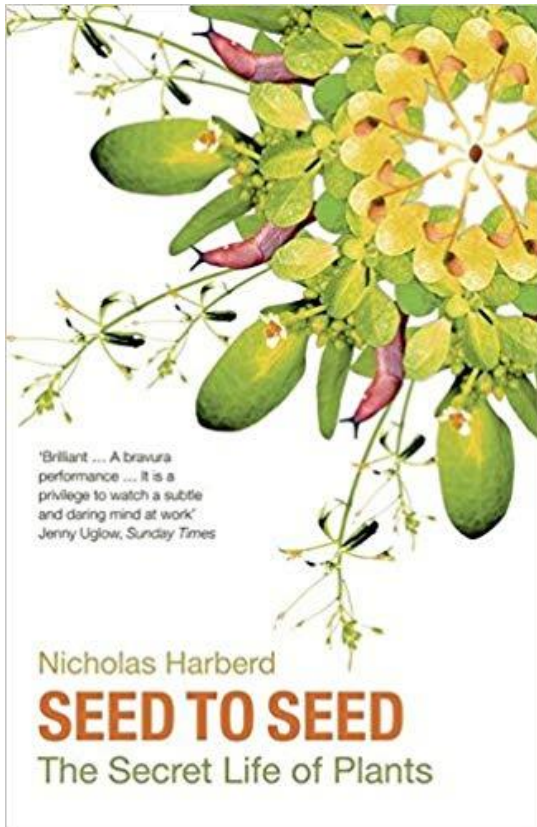
I uncovered these **Podophyllum hexandrum** seeds lying in groups where the fruit that contained them fell and disintegrated show no outward signs of germinating while the nearby *Eranthis hyemalis* seeds are in active growth. The mechanisms which govern when seeds germinate and plants grow always fascinated me.



Eranthis hyemalis seeds



Arabidopsis thaliana



You have all most likely walked past another plant that is germinating and growing now even though you may not have noticed or paid it any attention. *Arabidopsis thaliana* was one of the plants I discovered when I was young and my interest in plants was starting I found it growing at the bottom of walls at the edge of the pavement and when I researched and found its name which I have always remembered because of the rhythm of the syllables - most people would call it a weed but I like to think of it as a wild flower.

I was so delighted when a friend, John Watson, drew my attention to a wonderful book, [Seed to Seed: The Secret Life of Plants by Nicholas Harberd](#), which documents the entire life cycle of this plant not only from the physical observations we all can make but also explains the hidden molecular mechanisms controlling that growth. I wish I had found this book sooner because it explains in words that a gardener can understand what is going on with the DNA as the plants grow. The book is like a captivating peek into the author's diary following his visits to a plant growing in a graveyard while also telling the story ten years of discovery in his laboratory as his team worked to understand the genetic control of the growth of thale-cress.

I have always been fascinated by the growth of plants and reading this book has given me an even deeper appreciation of what is happening.





These **Anemone ranunculoides** shoots are among the many I have uncovered and recovered as I go through the process of preparing the beds for the spring growth.



Unlike Anemone and Eranthis, Galanthus shoots are among many bulbous plants that come equipped with toughened pointed tips on the leaves and tip of the flower stem which has evolved to help them force their way through such obstacles as a carpet of leaves or frozen soil.



Some of these Galanthus shoots were adjacent to the fern I cut back and as a result have bent to get into better light, now they will grow straight.



Galanthus woronowii



Galanthus plicatus hybrid



Galanthus



Some of our hellebores are showing the colour of their buds and flowers which is around the same stage of growth as this time last year but then we got hit with a prolonged period of severe cold which for the first time I can remember caused frost damage to the hellebores in our garden.

The same conditions of 'Sudden Stratospheric Warming' that lead to last year's cold weather conditions are again present and depending on how this affects the Polar Vortex and the Jet Stream we may get a similarly long cold end to winter again this year.





Helleborus



Interestingly some of the Helleborus in the North facing front garden are more advanced than those in the south facing back garden which reminds me of a question I am commonly asked about why some of our plants can, on occasion, be more advanced in growth than growers further south. We have to accept that there are many variable factors that influence when a plant will grow or flower and temperature is just one. Individual seedlings may respond slightly differently to temperature variations, then moisture levels will also influence the growth; it is also possible that the stray light from the street lights outside our front garden could result in some plants flowering that bit sooner.



Helleborus

Last week I watered the sand beds using watering cans because the outside water is turned off for the winter. No matter how I apply the water it causes a pooling on the surface which if left will harden into a hard impervious crust so I always go around roughing up the surface within a few days of watering.





Where the water pools leaves patches of fine material which as well as preventing water and air getting down into the sand also encourages the growth of mosses.



I go around scratching the surface using a small rake or fork in the larger open areas but where there is more growth and shoots I use the other end which has a single spike. I enjoy this process as it makes me look very carefully at every centimetre of the surface so that I do not damage any emerging shoots.



The newly raked sand surface.



Some of the Narcissus seedlings flowering in one of the sand plunge beds.



Narcissus romieuxii

I will leave you this week with a pot of *Narcissus romieuxii* in full flower.....