



# GALWAY CHAPTER NEWS

Issue 60  
Sept 2007

## Welcome back to the Meetings !!!!!

September already, where did the summer go? I remember leaving the June meeting full of good intentions, I'd spend an evening a week at the lathe, I'd make the spinning top early in the summer, etc. However I have yet to start the challenge piece for September. Perhaps summer is better suited to outdoor activities, painting, cutting grass, gardening, sun bathing (I wish!) home

improvements, who knows. Well it's great to be back, more workshops, more meetings, more ideas, more challenges, more chat, witty comments and, of course, some turning. We all work better when under pressure. So.....commit yourselves to making a spinning top for the September challenge.  
**SEE YOU ALL THERE**

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## CONTACT INFORMATION

Chairman: John McGann 091-635354  
Hon. Secretary: Ambrose O'Halloran 091-798225  
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### Committee members

George Anderson, Roger Greally, Martin Lodge

[www.galwaywoodturners.com](http://www.galwaywoodturners.com)

### Membership fees were due January 1st

Ordinary membership	€48
Family membership	€52
Student membership	€10
Associate membership	€10

## Chapter Events 2007

- January 25th A.G.M.
- February 8th Monthly Meeting
- February 22nd Workshop Brid & Ambrose O'Halaran
- March 1st Monthly Meeting in Quality Hotel Oranmore
- March 22nd Workshop in Des O'Halloran
- April 5th Monthly Meeting
- April 12th Workshop at George Anderson's
- April 22nd Launch of Exhibition
- May 3rd Monthly Meeting
- May 6th closed workshop with Elie
- May 12th One Day Seminar 2006 in Gort (Book now)
- May 13th Master-class with David Ellsworth
- June 7th Monthly meeting
- **Sept 6th Monthly Meeting**

## CHALLENGE RESULTS JUNE 2007



Joint 1st Place  
Clair Gurley



2nd Place  
Tim Lydon



3rd Place  
A O'halloran

## Eddie Collins and Martin Lodge

A big gang of turners arrived at Eddie Collin's house, on a beautiful summers evening. Eddies workshop is well equipped. Many of his jigs are home made. Last year Eddie demonstrated his home made vacuum chuck at Martin Lodges workshop. His system works perfectly.

This year Martin visited Eddies abode to make a beautiful spalted beech clock. The back of the clock was cleaned up and a recess cut to hold the clock mechanism. Bog oak dowels were used to mark the hours. Spacing for the dowels was achieved using the indexing plate at the headstock. I think that 12 o'clock was indexed at 1 and six was at 13, was 3 at 7 and 9 at 19?. Counting was never one of my strengths let alone telling the time! Martin used a handy jig while drilling the holes for the dowels. The drill wizard is manufactured by Oneway. It allows the drill to be mounted on the tool rest base and to be plunged in the work piece at a fixed angle. Once the clock face was drilled, the dowels were inserted and the face was beautifully finished. Martin put a bead outside and inside the ring of dowels. He left the centre of the face slightly convex. The clock movement was sourced from Mean-timedesign. The clocks with a longer shaft suit wooden clock faces better than the shorter ones. Thank you for all the hints and good humour throughout the "show".

We then retired for a cup of tea. Thank you for the generous refreshments. Eddies workshop hosts several swallow families. The birds did not pay attention to Martins woodwork advice. They flitted in and out like restless students all evening. They also had refreshments at the interlude.

Eddie took over the entertainment stakes after the break. We new that we'd have a great night of turning and craic when the two lads got together. He showed us how to use the drill wizard to drill holes in the stool seat, for the stool legs. The jig was set up to drill all the holes at exactly 15 degrees to the lathe axis. The angle was precisely setup using an educated eye. A stool leg was turned and drilled to hold the reinforcing dowels (or cross braces). Again the wizard repeated angles previously calculated (using the dihedral angle projected onto a vertical cross section). This time the protractor was not needed. We had good fun with this one! Eddie was now ready to assemble the seat. He unveiled a three legged stool that was just begging for another leg. The extra leg fitted perfectly.

What a brilliant night. Eddie thanked us all for coming to the workshop. He said that some of the best things that he made since joining the Galway Chapter were "FRIENDS". Well said Eddie, we all agree with you there.

G.A.



## Vermicomposting.....A novel use for your wood shavings!



We all enjoy making shavings. That's what our hobby is all about. But what do we do with these shavings? Well there are many practical applications: heating the workshop, mulching the flower beds, insulating the workshop floor to keep our feet warm and today's recommendation: composting your food scraps and garden waste!!! So why would you bother? Where do you start? What are the possible problems? What do you need to do? Here goes.....

**Vermicomposting uses worms to eat your food waste and generate wonderful compost.** Composting worms occur naturally in our gardens. They are different to earth worms. They do not live in the soil but prefer to remain on the surface. Well rotted farmyard manure is one of the best and cheapest sources. Of course you can buy composting tiger worms on the internet or at specialist garden centers. If you create the perfect

habitat they will invite themselves and set up house.

In order to compost one kilo of kitchen scraps you need quite a few worms. It is thus better to seed the compost with as many compost worms as possible. The worm population will continue to increase if you provide the correct conditions. Unhindered, the worm population could grow exponentially, doubling every few months! In practice this will not be the case. The population will level off to the number required to eat all of the available food! Hence one of the main retarders to exponential growth is food supply, the second limiting parameter is availability of living space. The community must have a clean bed of cellulose material to live in. Now you see where the WOOD SHAVINGS come in. Another important requirement is air circulation. The worms will die if deprived of air (surprise, surprise). The wood shavings will keep the compost open, thus avoiding sticky (and stinky) lumps. Being carbon based the shavings react favorably with the various byproducts of ongoing fermentation, and keep the compost sweet.

I compost all of our food scraps on a compost heap. We have five people in our home. This amounts to a plastic bucket of scraps every two days. The food disappears continuously. My compost heap is situated at the bottom of my garden and measures about 5ft by 3 ft. It generates about 5 barrows of wonderful compost every year. I have been composting garden waste and food matter for about 10 years and have some tips for those interested.

### Getting Started

Creating a home for your composting worms couldn't be easier. Worms don't need luxury accommodation and any decent sized bin or box can be adapted for vermicomposting. If conditions in the container are correct, your worms will thrive. In general it is easier to maintain a large compost bin than a small one. Large capacity means large reservoir of food and living space. A large space will support a larger population of worms, which will be better able to devour a large glut of scraps. A small bin requires greater attention to detail. One of the best ways of upsetting your pets is to over feed them. The excess food will rot and smell. This is less likely in a large container or compost heap. My experience with containers is that one never has enough space. That is: space to store the bins and bin surface area to feed the beasts. However I kept my composting worms in four 20 liter plastic bins for about two years. They eat all of our food scraps. Life got much easier for me when I emptied the bins in a pile at the end of the garden! My pet farm has lived happily there ever since!!

### Caring for my wriggly pets involves:

- (1) Putting the kitchen waste on the top surface of the compost heap. This includes cooked and raw vegetables, fruit remains, bread (they prefer it wet!), cereals, cooked and raw potato, cheese rinds, tea bags and (worm's favorite) used coffee grinds.
- (2) Mixing wood shavings with the stodgy grass cuttings to keep it aerated. Strips of torn newspaper will also work well.
- (3) Include soft shrub cuttings on heap
- (4) Avoid meats of any kind
- (5) Ensure that the heap does not dry out by covering it with plastic and hosing if necessary in dry weather (seldom necessary in Galway!) The cover will also stop birds from robbing your babies.
- (6) Again do not put too much grass cuttings on the heap. They form a sticky mass that can smother the worms. This will not happen if you mix grass with coarse WOOD SHAVINGS.
- (7) Another pitfall to avoid is allowing the heap to overheat for more than a day or two. This will quickly disrupt

the balance of power within the compost, in favour of the anaerobic communities. The compost will quickly become stale. The worms will burrow down to cooler areas of the pile (if they exist).

(8) Enjoy minding your pets!!! Show them to all the kids that play in your garden

Composting food and garden waste with worms works faster than regular (anaerobic) composting. Compost can be ready in 1 – 2 months as opposed to 6 months. Those of you who do not have enough space for a compost heap can compost bijoux style. This is how you go about it.

### **Making a wormery bin**

Worms are surface feeders. The larger the surface area the better. A surface area of one square meter will compost up to 10 kg of kitchen waste per week, (when working correctly). This is acceptable for normal household and small garden waste. A large plastic bin or wooden box will make a fine home for worms. Position your container out of direct sunlight on a couple of blocks or bricks to allow free drainage. As composting with worms is an aerobic process it is important that whatever container you use allows lots of oxygen in, but keeps flies and vermin out. Make a secure fitting lid for the container you are converting. Drill / punch or otherwise make a number of vents into your bin.

### **Drainage matters too**

If you add a tap near the base of your bin you will be able to collect any leachate produced to use as a plant feed. If you are not going to fit a tap then drill some holes in the base also for drainage. Bedding is the worms' first home and safe haven. There are many materials suitable for worm bedding, but I RECOMMEND WOOD SHAVINGS. You could however use shredded / torn newspaper or cardboard (preferably corrugated), leaves or manure. Add a good 40 cm layer of bedding. Don't worry if this fills your bin up a lot, it will reduce down quite rapidly once the worms get to work. If you are using only paper or cardboard add a shovelful of soil, as this will introduce many beneficial composting creatures to your bin to work with the worms. Then add composting worms. These are easily found feeding on rotting debris (compost heap or farmyard manure pile). Otherwise you must buy some.

It is better to feed the worms lightly at first. Add some uncooked scraps and check frequently to see how much your worms are eating. Don't add food until the last lot is almost gone. Worms will eat almost anything. However they will only eat fruit and vegetables that are starting to decay. Hard vegetables (raw cabbage, carrots etc) take a long time to disappear. Now a soggy slice of bread is a very tasty proposition for the wiggler. If you check on your worms often you will soon get a feel for what is right for them. Add wood shavings if the bin contents starts to smell a bit. Again it is much easier to house the worms in a compost heap outdoors.

### **How does Worm Composting work?**

Vermicomposting is much more complex than worms simply eating and excreting organic material. It is a highly complex chain of chemical, biochemical and biological interactions and reactions. Worms develop and maintain a culture of effective aerobic bacteria by culling pathogens, fungi and anaerobic bacteria. They also ensure the organic mass is well aerated. The whole process is based on natural systems which have evolved over hundreds of millions of years. Worms play a vital role in creating the optimum conditions for the beneficial organisms to establish and reproduce. These 'good' organisms compete with and dominate the more harmful microbes. The waste is reduced in volume and increased in nutrient value. Worms prefer a relatively alkaline environment. Normally ground garden limestone is sprinkled into the composter. (Only use garden lime, NOT Quicklime, of course!). Worms carry out fine grinding of the lime particles. This neutralises any excess acidity and liberates plant nutrients stored in the rock. Heavy metals are also fixed in the soil and released slowly avoiding toxicity.

### **Benefits of Vermicompost**

The typical levels of the nutrients (N, P, K) in vermicomposted green waste are of the order of 1-2 %. It would appear that vermicompost does not compare favourably with commercial chemical fertilizers. However two important factors should not be overlooked when comparing the two: the microbial content and the organic matter content.

Chemical fertilisers are either sterile or have negligible microbiological activity. The chemical fertilisers are composed primarily of water-soluble chemical salts. Once the salts have been depleted from a chemical fertiliser, then re-application is required to maintain the nutrient levels. The presence of nitrifying and nitrogen fixing bacteria in vermicompost means that some nitrogen can be fixed from the atmosphere and converted to plant soluble nitrates. The process continues as long as there is sufficient organic matter (which is present in vermicompost) and so re-application is not required at the same rate as with chemical fertilizers. Vermicompost, improves soil structure. This is why vermicompost is highly valued by gardeners all over the world. Vermicompost is biologically active and will continue to condition soils for up to 4 years.

**What about dangerous pathogens, enteric viruses and parasites?**

Naturally, it is important that where potentially harmful organisms are being composted, they should not be present in harmful numbers when the process is finished. With compost worm composting, this is indeed the case. The vermicomposting process has a profound effect on the levels of pathogens namely E.coli, Faecal Coliforms and Salmonella, with reductions of >99.9% possible. Material that is Vermicomposted exhibits greater pathogen reduction than that achieved with conventional composting. For peace of mind, avoid putting unhygienic matter on your compost

**More worm facts to share with your friends over a pint.**

- Earthworms are hermaphrodites. That is, each worm has both male and female sex organs.
- All worms can have babies. After mating, a worm will form a capsule (or cocoon) containing eggs. In about 21 days, 2-20 baby worms will hatch from the capsule. In about 2-3 months, the young worms are ready to breed.
- Earthworm eggs can survive in very dry conditions for a long time, the baby worms hatching out when the soil becomes wet.
- Compost worms breed every 7-10 days and so the population in a wormery will double in 2-3 months.
- Compost worms can eat about half their body weight in food in one day.
- Earthworms have no eyes, but can sense vibrations, light and temperature through special organs in the skin.
- Earthworms can live up to 15 years.
- Earthworms were introduced into North America by Europeans. They changed the flora and fauna within a few decades!

**So give it a go !**

George Anderson

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## Guild Events 2007

**October 13th Ballina National Seminar**

### September Meeting

**Thursday 6th Sept**

**8.00 P.M**

**Quality Hotel Oranmore**

The challenge piece is  
to make  
Spinning Top