

## Crop Rotation / Jesus Lord over Nature

**Carol:** How's your vegetable garden doing? Are you still enjoying growing your own food?

**Tammy:** It's going OK, thanks. I *am* enjoying it...mostly.

**Carol:** Mostly? So..is there a problem?

**Tammy:** Well, I've been wondering why some of the vegetables aren't growing as well as they did last year.

**Carol:** Hmmmm I wonder what's wrong?

**Tammy:** Remember our friend Harley, the gardener, who told us about soil that's alive?

**Carol:** Oh I do – that was so interesting...all about how to make compost from leaves and vegetable scraps and use it to feed the plants in the garden.

**Tammy:** Well...I told him about it and straight away he asked: 'Did you plant the same crops in the same soil as last year?' 'Oh, yes,' I said, 'they did so well last year that I thought I would just plant them in the same place again. Isn't that a good idea?'

**Carol:** Welcome to *Women of Hope*. I'm Carol. I wonder if you would have given the same answer as Tammy? I would have thought that if my vegetables did well last year, I should plant them in just the same spot again this year too. So, Tammy, what did Harley, the gardener tell you?

**Tammy:** He told me that over hundreds of years, gardeners have been trying out different ways of planting to try to find the best methods, and scientists have been doing it too, and they have all come to the same conclusion.

**Carol:** And that is??

**Tammy:** They have found that crops grow better if you plant different ones each year in the same part of your garden.

**Carol:** And did he say why?

**Tammy:** Well he told me something very interesting. Some plants use up the plant food in the soil, while others produce more of it. For example, nitrogen, which helps plants grow, is actually produced in the soil by some plants, such as peas and beans. Other plants use it up. So it makes sense to grow peas and beans one season and then something else next time to make use of the extra nitrogen that's in the soil. If you dig down to look at the roots of peas and beans you will see little lumps or nodules on them. This is where bacteria have been working to turn the nitrogen that's in the soil into a form that plants can use. After the crop has been harvested, cut the peas and beans off at the surface, leaving the roots behind. They will rot and release their nitrogen while the next crop is growing.

**Carol:** Well That is very interesting! So what's a good crop to grow after the peas and beans?

**Tammy:** Leafy vegetables like cabbage and broccoli could go in straight after them. And then you could plant crops with deep roots, such as potatoes, carrots, beetroot and radishes. You could also plant garlic, onions and spinach in this soil.

**Carol:** What about corn and pumpkin? I like growing them.

**Tammy:** He said they should grow well in the next season in this part of the garden, but you need to add some manure to feed the soil first.

**Carol:** And you haven't mentioned tomatoes and eggplant and sweet pepper. They are some of my favorites. Did he tell you about those?

**Tammy:** Yes, he did, I was just going to tell you about those because they're my favorites too. They go well in the fourth year, but you may need to add some garden lime to the soil before you do, as the other crops have been using it up.

**Carol:** It seems to me that you're talking about the crops going round and round the garden like a wheel.

**Tammy:** Well, that's just how it is. The scientists call it *crop rotation*, so yes, it *is* like a wheel. The different crops follow each other around the garden. So if you divide your garden up into about 4 different plots, you can have all of the vegetables growing at the same time, in the different plots.

**Carol:** Of course, it will depend on where you're living won't it! In some parts of the world you can grow vegetables all year round. You can grow several crops in one year. In other parts you can't grow anything in winter.

**Tammy:** That's right Carol. Our friend Harley had a lot of very useful information about gardening didn't he.

**Carol:** Yes, he did. He told us that peas and beans put nitrogen in the soil. So after those we could plant green leafy vegetables – like cabbage and broccoli...

**Tammy:** ...then after that, plants with deep roots, such as potatoes, carrots, beetroot and radishes....

**Carol:** ...and garlic, onions and spinach.

**Tammy:** And finally in the 4<sup>th</sup> year – crops like tomatoes, sweet pepper, eggplants...

**Carol:** This sounds fine if you have a big garden. But what about people who only have a very small garden, or just have pots to grow things in?

**Tammy:** You can use the same method with just 3 or 4 pots. Just grow different things in each pot each time, and you will get the best results. And the gardener told me something else that was really interesting too.

**Carol:** What was that?...

**Tammy:** Well, it's not just because of the plant food that crop rotation is helpful. In the soil there are millions of little creatures. Most of them are our friends, because they keep the soil alive and make the food available to the roots of the plants. But there are also lots of little enemies. Each type of plant has certain little creatures that enjoy eating it. So if you plant the same type each season, they keep on multiplying until there are so many that they can destroy the plants. But if we plant different crops each time, those enemies don't have the chance to increase their numbers, and YOU get to eat your crop.

**Carol:** So *crop rotation* will help to control the insects as well. They build up their numbers around one type of plant, and some lay their eggs in the soil nearby. You can trick them by not having their favorite plant around when they are ready to eat.

**Tammy:** That's right. Now, I wonder what *your* garden is like? You may not have the ideal situation for your garden – you may have lots of shade and not enough sunshine. You will just have to adapt what you plant. I hope you find this idea of crop rotation helpful, and that you will have more success in your garden from now on.

**Carol:** Isn't our natural world wonderful! And it all works together so beautifully. It makes us ask: who designed this wonderful thing we call nature? Who rules over it? We'll think about that after this song.

If you often listen to *Women of Hope* you might remember a story from the Bible we heard a while back, one from 2000 years ago, when Jesus helped his friends to catch fish. (John 21)

**Tammy:** Oh yes, I remember - they had fished on the lake all night and caught nothing, and then Jesus told them exactly where to throw their fishing nets, and they found a huge amount of fish there.

**Carol:** That's right. And you might have wondered - who is this Jesus, who could control the movements of fish in the lake? Well, today's story takes place on the same lake, and the same people were there...maybe it was even the same boat! Fran's here again to tell us this story...so make yourself comfortable...

**Fran:** Hello again! Have you ever been caught in a storm? I mean a really fierce storm, when the wind almost blows you off your feet, and the rain drives down like arrows. And it's even worse if you are out on the sea or a lake...water around you, water below you, water above you...and probably water *inside* you! Aargh!

Well, I'd like you to imagine that storm, and a tiny little boat being tossed about. Because that's what today's story is about. This is a true story about Jesus, from God's word, the Bible. You may have heard it before, but I want you to listen especially to the question people asked at the end. (Mark 4:35-41, Matt 8:23-27, Luke 8:22-25)

**Fran:** Jesus had been sitting in a small boat, at the edge of Lake Galilee, teaching groups of people. All day he talked to them about what God is like, and how they

should respond to God by trusting him and obeying him. His friends and followers had listened too.

Towards evening, as the sun was going down, Jesus said to a few of his close followers, 'Let's go across to the other side of the lake.' So they left the crowd behind, and set off to cross the lake. Jesus put his head on a pillow in the back of the boat, and went to sleep.

Suddenly a fierce storm blew up, whipping up the waves so that they spilled into the little boat, threatening to sink it.

They were very afraid. They woke Jesus, crying 'Master, teacher, don't you care that we're all going to drown? Save us!'

Jesus stood up in that tossing boat and gave an order. 'Be quiet' he said to the wind. 'Be still', he said to the waves. Straight away the wind died down... and the waves settled...and it became completely calm.

Then Jesus said to his friends, 'Why are you so frightened? Do you still have no faith?' But they were astonished and afraid, and they said to each other, 'Who is this man really? Even the winds and the waves obey him!'

And that is the end of this story from God's word.

What did you think about that story?... Did you expect that ending?... Let's go over it again together to be sure we have remembered it. Here's a way to remember it:  
Jesus sat, Jesus lay down, Jesus stood up. Ok?

So... Jesus sat - where? Hmm?

**Tammy:** In a small boat pulled up by the edge of the lake.

**Fran:** And what was Jesus doing, sitting in the boat all day?

**Carol:** Teaching the people about God; his message was to trust and obey God.

**Tammy:** Then in the evening he asked his friends to take him across to the other side of the lake. Did you notice that...he planned to get to the other side!

**Fran:** He did! Then... Jesus lay down. Where?... Yes, on a pillow at the back of the boat.

**Tammy:** He didn't seem too worried about the weather, did he? Even when a huge storm blew up, he slept on.

**Carol:** But his friends were frightened. So they did what you and I would have done, they woke up Jesus!

**Tammy:** What were they afraid of? Were they sea-sick?... (smile)

**Fran:** No, they thought they would drown. I can understand their fear. Lake Galilee is about 8 miles wide, or a bit over 13 km, so that would be a long way to swim in a violent storm at night, even if they *could* swim.

**Tammy:** Do you think they expected him to stop the storm?...

**Fran:** I'm not sure. They said, 'Master, save us!' But they sure wanted him awake, they wanted to know that he cared. And did he care?

**Carol:** Oh, He cared...Jesus always cares.

**Tammy:** He stood up in that boat that was tossing madly in the waves, and... he said?...

**Carol:** Be *quiet!* to the wind.

**Tammy:** Yes; and to the *waves* he said, *be still.* And it all stopped. It was calm.

**Fran:** Right. So, remember the stages in this story. Jesus sat in the boat...to teach, Jesus lay down in the boat...to rest, Jesus stood up in the boat...to calm the storm!

**Tammy:** Oh yes, you can tell your family the story if you remember those three steps. Jesus sat, He lay down, He stood up.

**Fran:** But the next bit is *really* important. What did Jesus say to his friends? ...He asked them why they were afraid, and if they still didn't have faith in him. Their fear was quite natural, but they were panicking, they didn't have confidence that he would rescue them, because I guess the storm seemed beyond *anyone's* control.

**Carol:** So what was that final question they asked?

**Fran:** Were you listening for it? They said to each other ‘Who... is this man really? Even the winds and the waves obey him.’ That’s a good question, isn’t it? You might be asking the same question today.

**Tammy:** You’re with *Women of Hope*, and we’ve been talking about a time when Jesus ordered a raging storm to stop, and it did...immediately. And it makes *us* ask the question; who can control the forces of nature? Who can stop storms?

**Carol:** What do *you* believe about the weather? Do spirits cause storms or droughts?... Does it just happen through the laws of nature? In a way that’s true- but who established those laws? Who set them up? God did.

**Tammy:** I wonder what those fishermen in the boat with Jesus thought about storms?

**Fran:** Let’s read some words they knew well, from the part of the Bible we often call the Old Testament. Listen to this ancient poem: (excerpts from Job 36:27- 37:7, GNB)  
Carol, can you read it please?

**Carol:**

It is God who takes water from the earth  
and turns it into drops of rain.  
He lets the rain pour from the clouds  
In showers for all mankind...  
This is how he feeds the people  
And provides an abundance of food...  
The storm makes my heart beat wildly.  
Listen, all of you, to the voice of God.  
He seizes the lightning with his hands  
And commands it to hit the mark...  
The majestic sound of thunder  
And all the while the lightening flashes...  
God commands snow to fall on the earth,  
and sends torrents of drenching rain.  
He brings the work of men to a stop;  
He shows them what he can do.

**Tammy:** OK, so they understood that God orders the weather; he made those 'laws of nature', such as water that evaporates to make rain clouds. And he planned it so that food would grow.

**Fran:** Yes, and they believed God also controls the storms...I wonder what purposes God has for a storm? I think one of those purposes is so that we would feel awe and wonder at God's power. Do you feel that when you watch a thunder-storm? I do.

**Carol:** So, it is *God* who orders the weather... But here is *Jesus* ordering the weather - and it *obeys* him immediately. So... no wonder they asked: 'Who is this man really?' Who is Jesus? ...

**Tammy:** I noticed something...Jesus used his power to help his friends...and save them. We have seen so many times that Jesus loves us. God loves us. His power is not something to fear, it is another reason to trust him. He loves you, he can help you with the *storms* in your life, and he wants you to call out to him, 'Master, save me!'

**Carol:** Of course; that's what he was teaching the people as he sat in the boat! To hear God's message and to trust him and obey him! I want to do that more every day, whether my life is calm or stormy.

**Tammy:** Thanks for that story, Fran, it's given us a lot to think about. And thank you for being with us again. It's time for us to go now; we hope you'll join us again next time.

**Carol:** And don't forget, If you have any questions about the things we've talked about, you can write to us in care of this station or at *Women of Hope*. We would love to hear from you. We do hope you will be with us again

**Fran:** Good bye for now...

**Tammy:** Goodbye, and have a great week filled with God's Blessings.