











# Koanga Moon Calendar



MONTH	MOON PHASE	GARDEN	ORCHARD
January 5th 2015	Full Moon 	<p>Water as required, especially just around the full moon as the plants are really wanting to grow. Vege beds require 5 Litres of water for every sq metre for optimum growth Foliar feed three days after full moon</p> <ul style="list-style-type: none"> <li>• Keep up tomato and pepper maintenance</li> <li>• Spray <b>Koanga Psyllid Solution</b> for shield bugs. Spraying now will stop the next generation hatching.</li> <li>• Harvest early potatoes</li> <li>• Remove seeds pods from sweet peas to keep them flowering</li> <li>• Layer carnations</li> <li>• Plant bulbs in garden beds, orchard or pots. Plant carrots, daikon, beetroot</li> <li>• Dead head dahlias to keep them flowering</li> <li>• Plant carrots, daikon, beetroot, turnips for Autumn eating in areas with a short growing season</li> </ul>	<p>Watch for water stress</p> <ul style="list-style-type: none"> <li>• Water if necessary, especially young trees</li> <li>• Spray <b>EF: Vegetative Foliar</b> on any young trees to promote healthy growth</li> <li>• Make a careful notes of when all your fruit ripens to develop an idea of how to fill gaps</li> <li>• and check what isn't fruiting and why, which pollinators work for you.</li> <li>• Begin process of pruning stone fruit immediately after crops come off for less disease issues.</li> </ul>
January 13th 2015	Last Quarter 	<p>Prepare beds, transplant and prick out for late and autumn crops and any other seedlings ready. Harvesting grains that overwintered (matured in cloche or greenhouse). Transplant lettuces and plant <b>rocket</b> and coriander under shade cloth</p> <ul style="list-style-type: none"> <li>• Continue watering</li> <li>• Continue tomato/pepper/eggplant maintenance</li> <li>• Weed and aerate the surface of newly planted beds - we mostly use our fingers while the weeds are all very small on a weekly basis</li> <li>• Prepare ground for autumn flowering annuals and biennials</li> </ul>	<p>Use any mulch on berries or perennial beds</p> <ul style="list-style-type: none"> <li>• Plan now for mulching next seasons planting's</li> <li>• Summer prune stone fruit</li> <li>• Watch for branches breaking under the weight of a heavy crop, may need to thin or stake up or tie up branches</li> </ul>


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January 21st 2015	New Moon	<p>Bird protection on all grain beds</p> <ul style="list-style-type: none"> <li>• Check out the Koanga Compost Making Booklet to ensure you make the best possible use of your grain stems (carbon). A ratio of 60:1 carbon:nitrogen gives you the highest return of biologically active carbon, micro organisms and complex nitrogen.</li> <li>• Collect, dry, freeze and store any vege and flower seeds</li> <li>• Plant cabbage, cauliflower, broccoli, kale, Brussels sprouts, lettuce, peas, mizuna, <b>rocket</b> in shade, <b>celery</b>, <b>coriander</b> and <b>parsley</b>. This planting is really important to avoid big gaps in May and June</li> <li>• Use <b>Koanga Psyllid Solution</b> to control white butterfly caterpillars on all brassicas until it gets cold</li> <li>• Weeding</li> <li>• Plant a wide range of <b>flowers</b> for Autumn and Spring flowering such as <b>calendula</b>, <b>chamomile</b>, stocks, <b>hollyhocks</b>, <b>Sweet William</b>, <b>Chinese forget me nots</b>, columbine and verbasicum</li> <li>• Harvest garlic and onion</li> </ul>	<ul style="list-style-type: none"> <li>• Bird Protection on trees with ripe fruit</li> <li>• Summer prune all stone fruit and young fruit trees after picking their fruit</li> <li>• Watch moisture levels in the soil carefully, especially under young fruit trees and citrus, feijoas and kiwifruit, which all have very shallow feeder roots. Water stress now could mean bad cicada damage and pear slug damage.</li> </ul>
January 27th 2015	First Quarter 	<ul style="list-style-type: none"> <li>• Check water levels in soil using fingers.</li> <li>• Plant seeds for Autumn eating</li> <li>• Feeding tomato, pepper maintenance</li> <li>• Late succession planting of dwarf beans and courgettes in areas with long growing seasons and or an ability to put chloches over beds.</li> <li>• The crops planted now will provide the most carbon next Spring, and will be great beneficial insect plants.</li> <li>• Foliar feed three days before the full moon</li> <li>• Check <b>Koanga Garden Planner</b> to ensure you get autumn winter crops planted in a way that will work with this summers garden and next summers garden. This takes some skill and the <b>Koanga Garden Planner</b> will be a huge help!</li> </ul>	<p>Irrigation of subtropicals may be essential for fruit set now</p> <p>Continue recording information about what's happening in your forest garden orchard to help you make future decisions. Eg. Fruit ripening times, flowing times, birds present, times of chopping and dropping legumes</p>
Feb 4h 2015	Full Moon 	<ul style="list-style-type: none"> <li>• Plant <b>root vegetables</b> such as carrots, beetroot, parsnips, turnips, swedes, daikon, salsify and scorzonera</li> <li>• Liquid feed tomatoes, peppers and eggplants with liquid comfrey, adding vermicast or some other source of humates/carbon to hold the minerals where the plant roots need then</li> <li>• Continue making liquid comfrey to feed tomatoes and peppers or simply continue to mulch these crops with comfrey/alfafa and/or drench soil with <b>EF:Cal Phos</b> to maintain plant health and production.</li> <li>• Foliar feed three days after the full moon</li> <li>• Spray tomatoes or potatoes with signs of blight or pumpkins showing signs of powdery mildew with raw milk (1 litre to 10 litres)</li> <li>• Cover seed crops from birds</li> <li>• Harvest seeds and dry and process as fast as possible</li> </ul>	<ul style="list-style-type: none"> <li>• Time to collect fruit tree catalogues</li> <li>• Bottle and preserve fruit</li> <li>• Check moisture levels in the soil</li> <li>• Net trees if needed to keep birds</li> <li>• Planning your winter planting and ordering trees for next winter</li> </ul>


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Feb 12th 2015	Last Quarter 	<ul style="list-style-type: none"> <li>• Prick out seedlings, transplant and weed</li> <li>• Harvest, dry and store seeds from your favourite vegetables and flowers, choose the largest heaviest seeds, they are the best!</li> <li>• Harvest summer grains: Quinoa, millet, summer barley. Mature or leave in green house to mature and dry.</li> <li>• Harvest seed from <b>Austrian Hulless pumpkins</b> when they have a yellow stripe on them.</li> <li>• Check corn, quinoa and amaranth grains for maturity and harvest. Amaranth and quinoa grains will fall out easily when rubbed. Thresh grains that have dried and matured. Keep stems for compost. Winnow grains and store.</li> <li>• Dry until the seed breaks when bent</li> <li>• Harvest shellout or dried beans and peas</li> <li>• Make sure all garlic, onions and shallots are harvested and well stored</li> <li>• <b>Plan winter garden</b> and make sure you know which beds your strawberries, garlic, early peas and broadbeans will be in. Check out the <b>Koanga Garden Planner</b> to learn how to plan your garden for all year production in a way that maximises nutrient dense food production and 'grows' soil</li> <li>• Foliar feed roses, and water roots well</li> <li>• Sow anemones, daffodils and <b>flowering bulbs</b></li> <li>• Lift <b>gladioli</b> when foliage turns yellow</li> <li>• Water and feed <b>dahlias</b> for long strong flowering</li> <li>• Take geranium cuttings</li> <li>• Layer carnations</li> <li>• Prepare beds for planting Autumn/Winter flowers</li> </ul>	<ul style="list-style-type: none"> <li>• If haymaking, use any extra to mulch orchards and garden beds</li> <li>• Plan now for mulching next seasons plantings</li> <li>• Summer prune stone fruit: peaches, plums, apricots etc.</li> <li>• Watch for branches breaking under the weight of a heavy crop, you may need to thin or stake up or tie up branches</li> </ul>
Feb 19th 2015	New Moon	<ul style="list-style-type: none"> <li>• Bird protection on all grain beds</li> <li>• Collect, dry, freeze and store any vege and flower seeds</li> <li>• Harvest onions, garlic and shallots, dry and string up or hang in onion bags</li> <li>• Plant cabbage, cauliflower, broccoli, kale, <b>brussels sprouts</b>, lettuce, peas, <b>mizuna</b>, rocket in shade, celery, <b>coriander</b> and <b>parsley</b>. This planting is really important to avoid big gaps in May and June.</li> <li>• Harvest shellout or dried beans</li> <li>• Harvest corn for drying and hang up</li> <li>• Weeding</li> <li>• Check with <b>Koanga Garden Planner</b> and ensure you have seeds/seedlings ready to go into empty beds. Choose black, purple, red and dark green vegetables for highest levels of phytonutrients</li> <li>• Plant a range of flowers for Autumn and Spring flowering such as <b>calendula</b>, <b>chamomile</b>, stocks, <b>hollyhocks</b>, <b>sweet William</b>, <b>Chinese forget-me-nots</b>, columbine and verbasum</li> </ul>	<ul style="list-style-type: none"> <li>• Irrigate all trees as required, especially young trees. Be sure to actually put your finger right into the soil to ensure the soil is moist.</li> <li>• Clean up herb banks and trim lavender</li> <li>• Pick and dry rosehips</li> </ul> <p>Make lists of maintenance jobs that need doing in orchard forest garden areas such as fencing, irrigation systems, drainage, removal of dead trees so that it can be done before winter and after April rains come to soften the ground</p>

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Feb 26th 2015	First Quarter  	<p>Now is a critical time to plant a range of winter food crops: Celery, cauliflower, broccoli, cabbage, kale, lettuce, Welsh bunching onions, parsley, silverbeet, chard, peas, Miner's lettuce and cornsalad, endive, cress, rocket and Chinese greens. Check out the <b>Koanga Shop</b> and be sure to choose a wide range of the varieties to ensure continuity of vegetables throughout the winter and early Spring as well as a full range of nutritional benefits.</p> <ul style="list-style-type: none"> <li>• Be sure to do a good job of growing your seedlings to ensure you can then grow them on into high quality vegetables.</li> <li>• Ensure you are able to provide all seedlings planted into your gardens the conditions and nutrition they need to become high brix, (nutritionally dense) food to nourish you! See the Koanga Institute Booklet: <b>Growing Nutrient Dense Food</b> to learn how you can do this without brought fertiliser</li> <li>• Plant <b>carbon/compost crops</b> now. These are crops that will improve your soil whilst growing and can be harvested in Spring when they are high in carbon to make high quality compost. <b>Oats</b> and lupins are great winter carbon crops in particular because they mine calcium and phosphate from the soil that is usually unavailable to the plant roots. <b>Rye, wheat</b> and <b>barley</b> are also excellent and all of them can be grown for edible seed crops as well. Broadbeans also make great winter carbon crops as well as providing great food.</li> <li>• Now is the time to plant your winter grains. The grains that can be planted now that are relatively easy to process and deal with in the kitchen are <b>hulless barley, sumire mochi hulless barley, rye</b>, konini wheat, <b>essene flaxseed</b>, and <b>hulless oats</b>.</li> <li>• Check moisture levels everywhere as plants grow very strongly over the full moon period only if they have the moisture and nutrients to do so.</li> <li>• Foliar feed three days before full moon for optimum plant nutrition. Don't forget to use your <b>refractometer</b> to check if you are doing something useful for your plants</li> <li>• Use liquid comfrey on tomatoes and peppers if they need a boost</li> <li>• Prick out and transplant seedlings, using <b>Koanga Seedling Inoculant</b> and if you don't have a high quality compost or vermicast in your mix then also add a large handful of <b>EF:Nature's Garden</b> per tray of seedlings to achieve strong seedlings capable of producing top quality high brix food.</li> <li>• Make compost as you take out Summer crops and prepare beds for winter planting. Follow the compost making guidelines to high quality compost production</li> </ul>	<ul style="list-style-type: none"> <li>• Continue moving nets around your fruit trees where appropriate</li> <li>• Water subtropical orchard and lime and apply manure, or fertiliser to achieve strong Autumn growth well before the frosts.</li> <li>• The key thing is to realise that fruit trees, just like vegetables, need the right minerals in the right relationships in order to produce large, reliable healthy crops of high brix fruit. If you regularly have problems of some kind you probably don't have the minerals right, the water or soil moisture for trees to access minerals</li> </ul> <p>Now is the time to get your fruit tree catalogues to choose and order your trees for next winter. If you are a <b>Koanga Member</b> this will be sent to you automatically. Otherwise check our online shop under the <b>fruit and nut section</b>.</p>
March 6th 2015	Full Moon  	<ul style="list-style-type: none"> <li>• Liquid feed three days after the full moon.</li> <li>• Plant carrots, swedes, beetroot and turnips</li> <li>• Feed liquid comfrey to tomatoes and peppers</li> <li>• Harvest basil, tomatoes and peppers for processing</li> </ul>	<ul style="list-style-type: none"> <li>• After the Full Moon Harvest and store apples and pears Bottle, dry and make into jam, wine, sauces pickles and chutneys any windfall or excess</li> <li>• Plant <b>Spring bulbs</b> in <b>orchard herbal ley</b>, keeping in mind the range of flowering times from the Erlicheers to the last daffodils</li> <li>• Attend to drainage, fencing and maintenance jobs before it gets too wet</li> </ul>


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March 14 2015	Last Quarter  	<ul style="list-style-type: none"> <li>● Prick out all the emerging seedlings for <b>Winter garden</b>.</li> <li>● Transplant</li> <li>● Bed Aerate</li> <li>● Check grain crops (quinoa, amaranth) for bird damage and maturity, and harvest if necessary. If ready to harvest, lay in a warm place in the greenhouse to finish maturing before threshing and winnowing.</li> <li>● Watch drying corn for bird and rat damage, leave on plants to dry as long as possible, then harvest and put in a dry warm place to finish drying. You could pull the husks back, tie in twos and hang over loops of strong string to dry</li> <li>● Harvest and process peppers, tomatoes and basil. Keep the best for seed. Harvest summer squash (not the long keepers) such as <b>Red Kuri</b>, <b>Delicata</b>, <b>Zimbabwe Squash</b>, <b>Buttercup</b>, the first of the kumara and onions and keep the best for seed</li> <li>● Harvest main crop potatoes, saving the largest tubers from the best plants for a seed crop</li> <li>● Harvest dried shell out beans and put in a greenhouse to dry until crunchy when they can be jumped on and separated from pods.</li> <li>● Harvest the hullless pumpkins, but do not remove seeds for several weeks, so that they fully mature before removing. If they pumpkins begin to deteriorate then remove immediately.</li> <li>● Finish lifting and transplanting Spring flowering bulbs</li> </ul>	<ul style="list-style-type: none"> <li>● Time to pick fruit for storage</li> <li>● Check all young fruit trees and shallow rooted trees for moisture stress such as citrus, feijoa and subtropicals</li> <li>● Manure citrus trees now and spray with foliar seaweed/ fish</li> <li>● Plant subtropicals only if you have water available for irrigation Summer prune last of stone fruit which makes the job easier in winter, with less chance of disease</li> <li>● De-sucker any remaining bananas</li> <li>● When harvesting fruit, check all trees for size of crop, disease, other problems, so you can think about changes that need to be made over winter</li> <li>● Pick up all fallen fruit</li> <li>● Thin inside old growth on gooseberries and currants</li> <li>● Cut out old fruit rods of logan berries and raspberries, and tie new growth up</li> </ul>
March 20th 2015	New Moon	<ul style="list-style-type: none"> <li>● Prepare early <b>garlic</b> beds</li> <li>● In warmer areas this is your last chance to sow orach, silverbeet, rainbow chard, endive, brassicas, peas, coriander and celery</li> <li>● Plant <b>compost crops</b> in empty beds</li> <li>● Last planting of biennial flowers and herbs such as <b>hollyhocks</b>, <b>sweet william</b>, columbine and verbascum.</li> <li>● Sow <b>calendula</b>, cineraria, poppies, <b>snap dragons</b> and pansy seed for flowers in the winter vege garden</li> <li>● Sow <b>heartsease</b> for companion to garlic and onions over the winter</li> <li>● Plant out Autumn/Winter flowering annuals that are ready now.</li> <li>● In colder areas it's the last month to sow winter early Spring greens and <b>broccoli</b></li> </ul>	<ul style="list-style-type: none"> <li>● A great time to establish your <b>orchard</b> <b>herbal leys</b> while the ground is warm and moist</li> <li>● Plant subtropical fruit trees</li> <li>● De-sucker bananas and cut off male part of the flower when fruit has set</li> <li>● Manure, mulch and compost around fruit trees while ground is warm but after rain comes</li> <li>● Plan and organise winter planting, including ordering trees</li> <li>● Take out any trees that need removing before it gets wet</li> </ul>


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March 27th 2015	First Quarter 	<ul style="list-style-type: none"> <li>• In warmer areas where broadbeans are planted in Autumn, soak overnight and plant into beds or into seed trays and transplant</li> <li>• In colder areas this is your last chance to sow <b>cornsalad</b> and <b>rocket</b> directly on the surface</li> <li>• Plant early <b>garlic</b></li> <li>• Also plant silverbeet, <b>rainbow chard</b>, and all leafy chards, <b>endive</b>,</li> <li>• brassicas, peas, <b>coriander</b> and <b>celery</b></li> <li>• Foliar feed three days before full moon</li> <li>• Finish planting any spare beds in <b>compost crops</b> such as lupins, broad beans, <b>oats</b>, peas, <b>wheat</b> and <b>rye</b>.</li> <li>• When transplanting winter veges, follow bed preparation process carefully to ensure high quality winter crops and growth</li> </ul>	Continue jobs as in the New Moon phase
April 5th 2015	Full Moon 	<ul style="list-style-type: none"> <li>• Foliar feed three days after full moon</li> <li>• In warmer areas this is last chance to sow carrots, turnips, daikon radish and beetroot before spring.</li> <li>• Tidy the garden up for winter in preparation for busy time in forest garden/orchard</li> <li>• Feed all <b>heavy feeders</b>, <b>roots and legumes</b> for maximum growth before it's too cold.</li> </ul>	<ul style="list-style-type: none"> <li>• Finish planting spring bulbs</li> <li>• Begin wrenching any trees for shifting this winter after the first rain, wrenching one side only this month</li> <li>• Note any trees that need removing this Autumn/Winter</li> <li>• Begin preparing ground for new orchard planting in Winter</li> </ul>


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April 12th 2015	Last Quarter  	<p>Last chance to weed beds and prepare for winter, transplanting last seedlings or sowing the last <b>compost crops</b>.</p> <ul style="list-style-type: none"> <li>• Double dig or prepare all remaining beds for Winter crops or <b>compost crops</b></li> <li>• Empty chicken straw-yard compost onto gardens and give chickens fresh carbonaceous material so they can scratch aerated material all winter</li> <li>• Feed all <b>heavy feeders</b> whilst still warm enough for good growth</li> <li>• Pick and store all main crops: Apples, pears, potatoes, kumara, pumpkin and dried beans</li> <li>• Clean up kikuyu barriers</li> <li>• Transplant last seedlings</li> <li>• Harvest whole <b>echinacea</b> plants, clean, dry, chop and put into jars and cover with vodka so <b>Echinacea</b> tincture will be ready for winter sore throats etc.</li> <li>• Prepare <b>strawberry</b> beds</li> <li>• Finish making compost with all remaining material from summer garden</li> </ul>	<ul style="list-style-type: none"> <li>• Remove any fruit trees that need taking out before it gets too wet.</li> <li>• If you are planning on planting fruit trees this winter our <b>Koanga Gardens Heritage Tree Range</b> is available now by mail order or pick up here near Wairoa, Hawkes Bay.</li> <li>• Begin preparing ground for planting fruit trees next month, check our <b>fruit tree planting guide</b> for strong tree growth.</li> <li>• Make sure you have read <b>Design Your Own Orchard</b> by Kay Baxter to avoid the many pitfalls there can be. Make sure any necessary orchard fencing is finished before planting starts.</li> <li>• Final de-suckering of banana plants this month.</li> <li>• Time to take rose cuttings and plum rootstock cuttings - soak in willow water and place into sand</li> <li>• Manure and fertilise fruit trees. Spread <b>EF:Soil Force</b></li> <li>• Begin planting natives for shelter hedgerows.</li> <li>• Finish planting spring bulbs.</li> <li>• Begin wrenching any trees for shifting this winter after the first rain, wrenching one side only this month.</li> <li>• Check the bananas to see if any de-suckering is necessary. You should have at maximum only two suckers on each fruiting palm, a big one and a small one.</li> </ul>



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April 19th 2015	New Moon	<ul style="list-style-type: none"> <li>• Prepare garlic, shallot and tree onion beds, manure and compost well, make sure the beds are very free draining.</li> <li>• Plant <b>garlic</b> (except for late garlic).</li> <li>• Prepare beds for strawberries and transplant</li> <li>• Prepare any other beds you have the energy to double dig or U Bar. This is a good month for bed preparation to help avoid stress in spring. Planting compost crops in prepared beds now for early Spring veges will make things far easier in August September. The more aerated the soil is over the winter the easier it will be in spring.</li> <li>• Direct sow <b>rocket, corn salad, ruruhau, Red Russian kale</b>, mustard lettuce and <b>Coral mizuna</b> under cloche to eat as fresh salad greens (mesclun) over winter</li> <li>• Sow <b>heartsease, poppies</b> and <b>snap dragons</b> and <b>sweet peas, hollyhock</b> and <b>aquilegia</b> for Spring flowering</li> <li>• Last chance to plant lupins, oats and other <b>compost crops</b></li> <li>• Plant broadbeans into trays in warmer areas and transplant when first leaves appear</li> <li>• Plant brassicas now in warmer areas: <b>Broccoli, kale, cabbage, cauliflower</b> etc. as well as <b>Corn Salad, Miner's Lettuce, Winter Lettuces: Odell's and Lighthouse lettuce, Tatsoi, Rocket, Henry's Chinese Cabbage, Ruruhau</b> etc. into trays for transplanting when ready</li> <li>• Transplant last of the winter veges and flowers</li> </ul>	<ul style="list-style-type: none"> <li>• Clean up <b>orchard herbal ley</b> and Mediterranean herb banks, replanting if necessary</li> <li>• Lavender</li> <li>• Rosemary</li> <li>• Tree Lupins</li> <li>• Echium</li> <li>• Honeywort</li> <li>• Tagasaste</li> <li>• Tree Medic</li> <li>• Geranium</li> <li>• Lespedeza</li> <li>• See <b>Forest Garden Database</b></li> <li>• Last chance to get drainage, fencing, shifting of compost and mulch in preparation for tree planting next month done</li> </ul>
April 26th 2015	First Quarter 	<ul style="list-style-type: none"> <li>• Fill your empty garden beds with <b>compost/carbon crops</b> as soon as you can to get them in before it turns too cold for strong growth.</li> <li>• Plant your <b>strawberries</b> if you have not already done so, they are also heavy feeders if you want high production, mulch well to avoid winter weeding.</li> <li>• Last chance to direct sow <b>rocket, cornsalad, ruruhau, Red Russian kale, Henry Harrington Chinese cabbage, Coral Mizuna</b>, mustard lettuce, <b>Asian Greens Mix</b>, and Winter Mesclun Mix under a cloche to eat as fresh salad greens (mesclun) over winter.</li> <li>• Plant Garlic, Tree Onions, Shallots, Potato Onions now making sure your beds are well aerated, well fed and not too wet over winter. These vegetables are <b>heavy feeders</b>, to crop well and to have high brix crops they need the right minerals in the right relationships. <b>EF: Nature's Garden</b> is what we use while we are building our soils up.</li> <li>• Sow heritage violas, pansies, <b>heartsease</b>, poppies, <b>hollyhocks</b>, stock, <b>sweet peas, calendula</b> and snap dragons for Spring flowering.</li> <li>• Feed all winter crops while soil is still warm enough to encourage growth both solid fertiliser and foliar feeding can be appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>• Feed citrus, feijoas and all deciduous fruiting trees now while the soil is warm for strong healthy growth in Spring and good fruit set. Fruiting trees need the right minerals in the relationships just like vegetables if they are to grow strongly and fruit well (high brix). We suggest <b>EF: Soil Force</b> especially formulated for orchard soils in New Zealand.</li> <li>• First feed with a balanced fertiliser then Spray <b>EF: Combo 12 Powder</b> on apples and their roots if you have a problem with woolley aphid. Woolley aphid's are only present when you trees are low brix ie. They don't have the right minerals in the right relationship to remain strong enough to resist pest issues. Water stress makes the problem worse as well. Check that your tree roots are moist, not dry or too wet!</li> </ul>






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May 4th 2015	Full Moon 	<p>Foliar or solid feed three days after full moon if you are trying to get your veges up to size before winter.</p> <p>In warmer areas this is the last chance to sow <b>carrots</b>, <b>daikon</b>, <b>turnips</b>, <b>radishes</b> and <b>beetroot</b> before winter.</p> <p>Plant <b>strawberries</b> if not already in, strawberries are heavy feeders too, pine needles make great mulch for them.</p> <p>Make compost heaps with all the autumn weeds and material available, be sure to add <b>EF: Nature's Garden</b> (3-5kg per 1x1x1 heap) if you are making your heap with low brix materials. Recycling the deficiencies in your compost will not grow high brix crops next season.</p> <p>If May continues warm and dry, double dig any beds that need it for early spring crops and plant <b>Lupins</b> or <b>oats</b>, in warmer areas as <b>carbon crops</b> now.</p> <p>Plant all empty bed in <b>carbon crops</b> now: Wheat rye, tic beans, oats, lupins, broadbeans etc.</p>	<p>If you are planning on planting <b>fruit trees</b> this winter our heritage range trees are available online (best to order in advance so you don't miss out). Supporting Koanga means we are able to continue collecting and saving heritage fruit trees and making them available again with their stories for the future. It also supports the research programs run by the Koanga Institute to find regenerative ways for home gardeners to grow our fruit trees.</p> <ul style="list-style-type: none"> <li>● Last chance to order fruit trees before winter planting</li> <li>● Finish planting <b>spring bulbs</b>.</li> <li>● Continue wrenching fruit trees if they are to be dug up or shifted, one side at a time, so as not to shock them too much.</li> <li>● De-sucker bananas if not already done.</li> <li>● Feed your trees if not already done this Autumn, to prepare for strong growth in Spring.</li> <li>● Feeding your trees with <b>EF: Soil Force</b> balances minerals which is the best way to avoid pests, disease and pour fruiting.</li> <li>● Good time to foliar feed citrus and fejoas with <b>EF: Soil Force</b> to encourage healthy growth before they flower in Spring.</li> </ul>

MONTH	MOON PHASE	GARDEN	ORCHARD
May 11th 2015	Last Quarter 	<ul style="list-style-type: none"> <li>• In warmer areas last chance to weed and prepare beds for winter, transplanting last seedlings or sowing last compost crops</li> <li>• Cover compost heaps to avoid water logging over winter</li> <li>• Drag out your cloche frames and cold frames and covers and hoops and maintain prepare for winter growing</li> <li>• Prepare garlic beds if planting on the solstice</li> <li>• Empty compost for chicken scratch yard for mulching perennials and berries</li> <li>• Setup cloches to cover salad crops if desired to achieve a longer growing season</li> <li>• Prepare garden and propagation areas for winter</li> <li>• Oil and sharpen tools and <b>buy any new tools</b> you may need for the season ahead</li> <li>• Make sure chickens and poultry have adequate winter housing and minerals so they will begin laying early again or if young will continue through winter.</li> </ul>	<ul style="list-style-type: none"> <li>• Order fruit trees for garden support species</li> <li>• Prune fruit trees</li> <li>• If it's a warm winter you may have strong grass growth in which case you can scythe and use it to mulch currants, berry fruit and perennial veges (e.g. asparagus) which you may struggle to find mulch for in spring when you need it for the fruit trees</li> <li>• Compost and feed (<b>EF: Soil Force</b> or <b>EF: Nature's Garden</b>) all berries.</li> <li>• Chop and drop legumes in forest garden support trees to enable heavy feeding fruit trees to grow optimally.</li> <li>• Prune and tie up boysenberries, logan berries, raspberries etc. Instructions on how to do this are in <b>Design Your Own Orchard</b>.</li> </ul>
May 18th 2015	New Moon	<ul style="list-style-type: none"> <li>• Prepare garlic, shallot and tree onion beds, manure and compost well, make sure the beds are very free draining.</li> <li>• Plant garlic (except for late garlic).</li> <li>• Prepare beds for strawberries and transplant</li> <li>• Prepare any other beds you have the energy to double dig or U Bar. This is a good month for bed preparation to help avoid stress in spring. Planting compost crops in prepared beds now for early Spring veges will make things far easier in August September. The more aerated the soil is over the winter the easier it will be in spring.</li> <li>• Direct sow <b>rocket</b>, <b>corn salad</b>, ruruhau, <b>Red Russian kale</b>, mustard lettuce and <b>Coral mizuna</b> under cloche to eat as fresh salad greens (mesclun) over winter</li> <li>• Sow <b>heartsease</b>, poppies and <b>snap dragons</b> and <b>sweet peas</b> for Spring flowering</li> <li>• Last chance to plant lupins, oats and other <b>compost crops</b></li> <li>• Plant broadbeans into trays in warmer areas and transplant when first leaves appear</li> <li>• Plant brassicas now in warmer areas: <b>Broccoli</b>, <b>kale</b>, <b>cabbage</b>, <b>cauliflower</b> etc. as well as <b>Corn Salad</b>, Miner's Lettuce, Winter Lettuces: <b>Odell's</b> and <b>Lighthouse lettuce</b>, <b>Tatsoi</b>, <b>Rocket</b>, <b>Henry's Chinese Cabbage</b>, Ruruhau etc. into trays for transplanting when ready</li> <li>• Transplant last of the winter veges and flowers</li> </ul>	<ul style="list-style-type: none"> <li>• Clean up orchard herbal ley and Mediterranean herb banks, replanting if necessary</li> <li>• Last chance to get drainage, fencing, shifting of compost and mulch in preparation for tree planting next month done</li> </ul>




MONTH	MOON PHASE	GARDEN	ORCHARD
May 26th 2015	First Quarter  	<ul style="list-style-type: none"> <li>• Time to rest, enjoy the winter peace and warm fires, and summer wine .</li> <li>• Create some space in your life, and then look back... before looking forward again... this is a time for reflection before moving forward again!</li> <li>• How did your garden perform last season? Were you happy with the performance of your beds, and the the production levels achieved, how high were your brix's? Do you feel as though you know what your next step is towards being able to supply your family high brix vegetables year round?</li> </ul> <p>They are all big questions and very often as gardeners doing one of the most important jobs on earth we don't actually understand the laws of nature we are working with.... why things go wrong.... and what we actually need to do to sort it. I find we tend to go from one technique to another without any real understanding of the principles behind what we're doing. If you are keen to learn what is actually going on in your soil, how plants actually grow and what you can do work with nature, and how you can plan for year round regenerative high brix production, check out the <a href="#">Koanga Booklets</a> we are writing especially to support you on this journey. Our <a href="#">Growing Nutrient Dense Food Booklet</a> and <a href="#">Beginner Gardener Booklet</a> will give you a great start!</p> <p>If you're ready to use the colder months for some serious garden planning in front of the fire place then our <a href="#">Garden Planner</a> is exactly what you need! It covers the crop rotations and takes you step by step through everything you need to consider in order to create your dream garden and feed you and your family with a range of nutrient dense vegetables.</p>	<ul style="list-style-type: none"> <li>• This is the month to prepare for tree planting. Check <a href="#">Design Your Own Orchard</a> for Instructions and read our <a href="#">our tree planting instructions</a> and prepare yourself before your trees arrive.</li> <li>• Pruning can be started now on any trees that have lost their leaves. Pruning is a great time to take stock of the health of your fruit trees and make notes for maintenance and future jobs.</li> <li>• Be sure to cover all large cuts with <a href="#">Tree Paste</a> to keep silver leaf and other problems out.</li> <li>• Pruning fruit trees is a bit of a lost art, don't be put off because you don't know how to do it. Find somebody to learn from, it will be a life long journey but your trees are part of your family and how well they produce fruit (you can actually harvest), grow and remain healthy will be some extent dependant on · how well you prune them.</li> <li>• Tree pruning demonstrations are available at our Annual Koanga Fruit Tree Day</li> <li>• If it's a warm winter, you may have strong grass growth in which case you can scythe and use it to mulch currants, berry fruit and perennial veges (e.g. asparagus) which you may struggle to find mulch for in Spring when you need it for the fruit trees.</li> <li>• Fertilise and prune feijoas (feijoas are pollinated by birds so need to be pruned from inside to be open)</li> <li>• Prune, lime, fertilise, (they love cow manure) compost and mulch all berry fruits, blueberries, cranberries, blackberries, logan berries and raspberries.</li> <li>• De-sucker raspberries that still need it.</li> <li>• Begin pruning macadamia's once the crop is off</li> </ul>

MONTH	MOON PHASE	GARDEN	ORCHARD
June 3rd 2015	Full Moon 	<ul style="list-style-type: none"> <li>• Clean out green house and propagation facilities</li> <li>• <b>Organise your seed raising mix</b> for the spring. See comprehensive details in the <b><u>Koanga Garden Guide</u></b> on how to make your own and grow high quality seedlings.</li> <li>• Garden Planning</li> <li>• Seed Saving</li> <li>• Collect Seed Catalogues. To get our catalogue in July &amp; Feb you need to <b><u>become a Koanga Member</u></b></li> </ul>	<ul style="list-style-type: none"> <li>• Now that the energy is returning to the roots, begin pruning</li> <li>• Decide whether you're going to deal with pests and diseases over the next year by dealing with soil health, (minerals) or if you're going to spray the pests and diseases</li> <li>• If the focus is on healthy soil get a <b><u>Reams soil test</u></b> done, then find a way to get the minerals balanced, this may take a few years, but be prepared with <b><u>fertiliser</u></b> for using in August</li> <li>• <b><u>EF: Soil Force</u></b> is the best tree fertiliser to balance minerals for strong tree health</li> </ul>
June 10th 2015	Last Quarter 	<ul style="list-style-type: none"> <li>• Make sure you <b><u>do your planning</u></b> well before beginning to sow seed</li> <li>• Make sure you have collected your seed catalogues (these are mailed out automatically if you are <b><u>one of our members</u></b>). Have a plan of your garden and have carefully mapped out the details and your priorities. <b><u>Do you want to save any seeds this season?</u></b> Have you checked out if this is possible? <b><u>Information to support you along the way is in our Koanga Booklets.</u></b></li> <li>• <b><u>The Koanga Garden Planner</u></b> includes seed saving in the planning process. This is a must if you're serious about taking your food planning to another level!</li> <li>• The action this month is in front of the fire, planning and organising</li> <li>• Sow <b><u>dwarf beans</u></b> and <b><u>courgettes</u></b> into seed trays in warm green house</li> </ul>	<ul style="list-style-type: none"> <li>• Begin planting fruit trees. Be sure to plant your trees well. <b><u>Click here for instructions how you plant them</u></b> will largely determine how well they grow and how much fruit they will give you. Environment determines genetic expression!!!</li> </ul>
June 17th 2015	New Moon	<ul style="list-style-type: none"> <li>• Enjoy the solstice, the beginning of the gardeners year</li> <li>• Use the energy of the moon to finalise your new seasons planning and order your seeds</li> <li>• Finish cleaning up any propagation facilities seed trays etc. getting ready to begin planting next month</li> </ul>	<ul style="list-style-type: none"> <li>• Begin planting fruit trees. Be sure to plant your trees well. <b><u>Click here for instructions how you plant them</u></b> will largely determine how well they grow and how much fruit they will give you. Environment determines genetic expression!!!</li> </ul>

MONTH	MOON PHASE	GARDEN	ORCHARD
June 24th 2015	First Quarter 	<p>Have a well earned rest - enjoy all that summer food and wine that was stored away in the Autumn!</p> <ul style="list-style-type: none"> <li>• Celebrate the beginning of the gardener's year and the dream for the season to come.</li> <li>• Organise yourself with <b>fertiliser</b>.</li> <li>• Get a <b>reams soil test</b> done.</li> </ul>	<ul style="list-style-type: none"> <li>• Prune tie and de-sucker, manure and mulch, if not already done, berry fruits, blueberry, cranberry, blackberry, loganberry, raspberry, currants, etc. <b>Design Your Own Orchard</b> has a chapter on pruning berry fruits</li> <li>• Prune macadamias and tamarillos that have finished cropping. If you stagger the pruning of tamarillos you will also stagger their fruiting</li> <li>• If you're having problems with pollination of fruit trees, and bees is not the problem, then it may help to record all your flowering times on a chart for a season or two. Set this up now if needed</li> </ul>
July 2nd 2015	Full Moon 	<ul style="list-style-type: none"> <li>• Clean out greenhouse and propagation facilities</li> <li>• Organise your seed raising mix for Spring. If you're making your own use 1/3 screened garden soil, 1/3 screened compost, 1/3 sand ( not salty ocean sand) and then add around 10% vermicast if you have good vermicast. I often add a handful of <b>EF:Nature's Garden</b> for best results. See the <b>Koanga Garden Guide</b> for instructions on growing top class seedlings.</li> <li>• This is your last chance to ensure your planning is all in place, your decisions made about <b>what you'll save for seed</b>, your seeds bought and all ready to go.</li> <li>• For those who have passive solar cloches you can plant early lettuces, Chinese cabbages, rocket, endive, silverbeet, all chards, peas and beans.</li> <li>• Follow instruction for germination on our seed packets carefully. Koanga seed packets have detailed Biointensive planting instructions.</li> <li>• For those of you in frost free or close to frost free areas this is your time to get your early seed in as follows.. too early yet for most of us</li> <li>• Sow dwarf beans and courgettes into seed trays for early planting sunder a cloche</li> <li>• Sow late <b>sweet peas</b></li> <li>• Sow early Spring flowers, larkspur, petunia, <b>calendula</b>, <b>foxglove</b>, honesty, love in a mist, poppy and cornflower.</li> <li>• In warm areas prepare cloches to warm up the soil ready for early planting of dwarf beans, and courgettes, beetroot, carrots, lettuce, coriander and all early greens</li> <li>• In warm areas as vege beds become dry enough to work, begin taking out compost crops as you are ready to plant, making compost and either digging over or U-Barring beds</li> <li>• Feed strawberries well and rhubarb at this time</li> </ul>	<ul style="list-style-type: none"> <li>• Make your decisions around nutrition maintenance in your orchard. If you got a soil test done it's time to get the fertiliser ready to apply next month: Order <b>EF: Soil Force</b></li> <li>• Lime will benefit almost all orchard soils</li> <li>• Be sure to mulch all newly planted trees to prevent competition</li> <li>• With grass during the first growing season continue With tree planting</li> </ul>



MONTH	MOON PHASE	GARDEN	ORCHARD
July 9th 2015	Last Quarter 	<ul style="list-style-type: none"> <li>• <b>Read books</b> to expand your knowledge for the new season</li> <li>• Sharpen all your tools well so you are ready to go</li> <li>• Setup your hot beds or build a passive solar cloche to get your seeds germinating early</li> </ul>	<ul style="list-style-type: none"> <li>• Plant fruit trees</li> <li>• Prune fruit trees</li> <li>• Manure and prune fejoas</li> <li>• Prune, tie and de-sucker, manure and mulch (if not already done) berry fruits, blueberry, cranberry, blackberry, loganberry, raspberry, currants etc.</li> <li>• Prune macadamias and tamarillos that have finishing pruning</li> </ul>


MONTH	MOON PHASE	GARDEN	ORCHARD
July 16th 2015	New Moon	<ul style="list-style-type: none"> <li>● Finish any planning, thinking carefully about any seed saving you might wish to do. See the Koanga <a href="#">Save Your Own Seeds Booklet</a> or the <a href="#">Koanga Garden Planner</a> for more information.</li> <li>● Sharpen or collect garden stakes, trim pea stakes, prepare your seed trays and garden labelling system, check all cloche hoops and covers, as well as bird netting and hoops in preparation for the spring</li> <li>● <b>Make your seed raising mix</b> now or buy one that does not contain fungicides. Daltons is good but needs a balanced fertiliser added to grow nutrient dense seedlings We use <a href="#">EF: Nature's Garden</a></li> <li>● <a href="#">Koanga seedling inoculant</a> on all seedlings</li> <li>● Things begin to move in the garden this month</li> <li>● Finish cleaning out greenhouses and garden shed areas</li> <li>● In warm areas prepare cloches to warm up the soil for any early crops that might need it over the next few weeks eg. early <a href="#">dwarf beans</a>, and <a href="#">courgettes</a>, <a href="#">cucumbers</a>, or direct sowing early <a href="#">rocket</a>, <a href="#">winter mesclun mix</a> or <a href="#">Asian mesclun mix</a> etc.</li> <li>● Check out our <a href="#">seed sowing instructions</a>, before planting your seeds, It might just make all the difference</li> <li>● Sow tomato seeds for greenhouse.</li> <li>● Plant peas onto trays for transplanting when 3-10 cm high</li> <li>● Sow <a href="#">broadbeans</a> into trays, and transplant as soon as tops emerge</li> <li>● <b>Sow dwarf beans</b> and <a href="#">courgettes</a> into seed trays for early planting under a cloche</li> <li>● Sow late <a href="#">sweet peas</a></li> <li>● Sow early Spring flowers: <a href="#">Larkspur</a>, <a href="#">petunia</a>, <a href="#">calendula</a>, <a href="#">foxglove</a>, <a href="#">poppy</a> and <a href="#">cornflowers</a></li> <li>● Prepare cloches to warm up the soil ready for early planting of <a href="#">dwarf beans</a>, and <a href="#">courgettes</a>, <a href="#">beetroot</a>, <a href="#">carrots</a>, <a href="#">lettuce</a>, <a href="#">coriander</a> and all early greens</li> <li>● Sow <a href="#">Essene flaxseed</a> directly into beds</li> <li>● Sow early grains such as <a href="#">barley</a> and <a href="#">oats</a></li> <li>● As vege beds become dry enough to work, begin taking out compost crops, making compost and either digging over or U-barring beds</li> <li>● Feed <a href="#">strawberries</a> well and rhubarb at this time</li> </ul>	<ul style="list-style-type: none"> <li>● Finish pruning your deciduous fruit trees, if not done already. Pruning fruit trees is a bit of a lost art, don't be put off because you don't know how to do it. Find somebody to learn from, it will be a life long journey but your trees are part of your family and how well they produce fruit (you can actually harvest), grow and remain healthy will be some extent dependant on how well you prune them. Maybe you'll be able to make our annual Solstice tree Day next year!</li> <li>● Finish planting your trees for best results over the first growing season. Trees planted after this time will not have well enough developed roots to handle dry over summer, without watering</li> <li>● Last chance to check that all fruit trees are staked well and that bark is not rubbing on stakes or ties strangling your trees!</li> <li>● Grass will be beginning to grow now so make sure all young trees are mulched</li> <li>● If you're having problem with pollination of any fruit trees now is the time to set up a foliar spraying program using <a href="#">EF:Reproductive Foliar</a>. The minerals in this foliar will switch the trees to set fruit</li> <li>● Now is also the time to begin using your flowering time chart drawn up to record flowering time so you can see how your pollinators are actually flowering when you need them to and give you some clues as to what is pollinating what</li> </ul> <p>Now is a great time to put your orchard fertiliser on. Get a <a href="#">Reams soil test</a> done and we recommend you buy your fertiliser from <a href="#">Environmental Fertilisers</a> if you are wanting large amounts. Their specific tree fertiliser is called <a href="#">EF:SoilForce</a></p>

MONTH	MOON PHASE	GARDEN	ORCHARD
July 24th 2015	First Quarter 	<ul style="list-style-type: none"> <li>• Clean out tunnel houses, greenhouses and potting benches ready for Spring planting - slugs and snails live under rubbish and things lying around</li> <li>• Repot and revitalise pot plants</li> <li>• Prepare beds for early potatoes, peas and broad beans (in the North).</li> </ul>	Once all planting and pruning, stacking, manuring and mulching is in the orchard, it's holiday time. If you're onto it you'll get a small bread before the vege garden is full on!
July 31st 2015	Full Moon 	As the temperature changes and you feel things warming up begin foliar feeding <ul style="list-style-type: none"> <li>• Collect your seeds ready for a big early garden planting into seed trays next new moon</li> <li>• Plant early potatoes Jersey Bennes, Karoro, King Edward</li> <li>• Plant broad beans and peas into trays ready to transplant when tops are up</li> <li>• Plant waterchestnuts into trays with a plastic lionber to keep very moist</li> </ul>	Have a knees up
August 7th 2015	Last Quarter 	<ul style="list-style-type: none"> <li>• Prepare seed raising mix 1/3 sieved compost, 1/3 sieved garden soil, 1/3 sand - possibly 10% vermicast if available.</li> <li>• Pot up any cuttings that you took in May and are now shooting in the sand box</li> <li>• Weed garden beds, make compost, double-dig or prepare beds for planting as they become dry enough last quarter</li> </ul>	Slug and snail control essential around newly grafted trees <ul style="list-style-type: none"> <li>• Mulch all fruit trees - you can use the scythed grass from the orchard to do this a this time of the year</li> <li>• Pot up any cuttings that you took in May and are now shooting in the sand box</li> </ul>






MONTH	MOON PHASE	GARDEN	ORCHARD
August 15th 2015	New Moon	<ul style="list-style-type: none"> <li>● Last month for ordering <b>artichokes, yams and ulluco</b></li> <li>● Last week for planting <b>flaxseed, hulless barley</b> and <b>hulless oats</b></li> <li>● Sow seed into trays of the best Spring <b>lettuces</b>, Odells, Mignonette, Half Century and Lighthouse</li> <li>● Plant your favourite <b>peas Capucjyner, Southland Sno, Picton Sno, WF Massey</b> etc. We have an amazing range of heritage peas from the ancestors of this land</li> <li>● Plant all spring greens: <b>Silverbeet, Rainbow Chard</b> etc. <b>Bloomsdale Spinach, Japanese Spinach, Broccoli, Kale, Endive, Upland Cress, Coriander</b> and <b>Parsley</b></li> <li>● Plant <b>Welsh Bunching onions</b></li> <li>● Plant Asian Greens such as <b>tatsoi, Chi Hi Li, Henry's Chinese cabbage</b> and <b>Red Coral Mizuna</b></li> <li>● Plant early courgettes: <b>Cocozelle, Scallopini, Crookneck</b>, and <b>Long Bush Marrow</b> (which are also great cougettes) and <b>Kamo Kamo</b>.</li> <li>● Time to plant <b>eggplant</b> and <b>pepper</b> seed into trays in a very warm place</li> <li>● Plant <b>celery</b></li> <li>● Plant asparagus seed</li> <li>● In frost free areas early <b>corn</b> can go into trays now</li> <li>● Transplant all early seedlings under cloches as ready</li> <li>● Seriously removing all compost crops now as they are required (did you use the <b>Garden Planner</b>? Get your plan sorted so you know what to do next). In warmer areas make compost heaps and prepare beds for main crop planting</li> <li>● Watch for slug and snail damage, may need to do some night patrols</li> <li>● Prick out all seedlings as they emerge, as soon as second leaves appear following spacings on Koanga Seed packets</li> <li>● Weekly foliar feed seedlings in green house with <b>EF: Cal Phos</b> to promote strong roots, healthy growth and loads of microbial action. <b>Seedling inoculant</b> can be used now for the roots as you transplant them.</li> <li>● Preparation of garden beds very important - apply 2cm of compost to all beds just before planting, forked into top few centimetres, along with a good all purpose organic, highly mineralised and microbially active fertiliser. We recommend <b>EF:Natures Garden</b> and <b>EF:Calcium Trigger</b>.</li> <li>● Plant broadbeans. In colder areas the <b>Scottish Broadbeans</b> do best.</li> </ul>	<p>Make sure all citrus trees, feijoas, and kiwifruit are well manured and mulched and you have a watering system in place for them.</p> <ul style="list-style-type: none"> <li>● This is the last month to put on a good orchard fertiliser, such as <b>EF: Soil Force</b>, or <b>EF: Nature's Garden</b> if you have soil issues, lack of available calcium or pest and disease problems.</li> <li>● Foliar feed 3 days before full moon using products that will strengthen the health of trees to avoid later problems: <b>EF: Vegetative Foliar</b>, seaweed, fish or vermicast. Once the minerals are balanced in the soil you will not need to apply foliar sprays</li> </ul>


MONTH	MOON PHASE	GARDEN	ORCHARD
August 23rd 2015	First Quarter 	<p>Sow any seeds you missed last week and take care of all seedlings</p> <ul style="list-style-type: none"> <li>• Sow early grains such as <b>barley</b> and <b>oats</b></li> <li>• Watch for slug and snail damage, may need to do some night patrols</li> <li>• Prick out all seedlings as they emerge, as soon as second leaves appear</li> <li>• Weekly foliar feed seedlings in green house with <b>EF: Cal Phos</b> to promote strong roots, healthy growth and loads of microbial action. Seedling inoculant can be used now for the roots as you transplant them. If you missed adding it to your seed raising mix.</li> <li>• Preparation of garden beds very important - apply 2cm of compost to all beds just before planting, forked into top few centimetres, along with a good all purpose organic, highly mineralised and microbially active fertiliser. Check out our <b>fertiliser recommendations</b> if you don't have great compost and your own sources of garden nutrition in place</li> </ul>	<p>Make sure all citrus trees are well manured and mulched and you have a watering system in place for them.</p> <ul style="list-style-type: none"> <li>• This is the last month to put on a good orchard fertiliser, such as <b>EF: Soil Force</b>, if you have soil issues, tree health issues, or lack of fruit set issues. Do a <b>Reams soil test</b>.</li> <li>• Foliar feed 3 days before full moon using products that will strengthen the health of trees to avoid later problems: <b>EF: Vegetative Foliar</b>, seaweed, fish, compost tea or vermicast... use a refractometer to test if what you are doing is supporting the tree health or not.</li> </ul>
August 30th 2015	Full Moon 	<p>Foliar feed seedlings to promote strength</p> <ul style="list-style-type: none"> <li>• Sow <b>carrots</b>, <b>beetroot</b>, <b>parsnip</b>, <b>daikon</b>, <b>turnips</b>, <b>salsify</b> and <b>scorzonera</b> and <b>potatoes</b>. 3 days after full moon</li> <li>• Sow <b>Jerusalem artichokes</b></li> <li>• Transplant the last of your <b>onion</b> sets (seedlings)</li> <li>• Continue bed preparation and compost heap making</li> <li>• General tidy up, weed, mulch</li> </ul>	<p>Foliar feed any trees you think might need the extra strengthening.</p> <ul style="list-style-type: none"> <li>• Finish mulching</li> <li>• Organise hoses and watering systems this month!</li> </ul>



MONTH	MOON PHASE	GARDEN	ORCHARD
Sept 5th 2015	Last Quarter 	<p>As your garden beds begin to dry enough to work in them, pull out compost crops, make compost heaps, remembering that if you make your heaps with low brix crops you will just be recycling the deficiencies. You may need to add minerals to your heaps to bring up the quality of the compost to a level that is able to grow nutrient dense plants.</p> <ul style="list-style-type: none"> <li>● Prepare beds by either double digging, U Barring or forking</li> <li>● Getting the nutrition right in your beds will determine the quantity and quality of your food from the garden this season. Read the <b><u>Koanga Garden Guide</u></b> or <b><u>How To Grow Nutrient Dense Food</u></b> to put your own systems in place to achieve that. In the meantime if you need support we recommend you follow our best practice fertiliser program</li> <li>● Build cloches or beds ready for early veggies needing them</li> <li>● Take good care of seedlings, keep them actively growing if you want nutrient dense food later</li> <li>● Get slug and snails under control</li> <li>● Harvest and dry first nettle leaves</li> <li>● Prepare and plant new asparagus beds with last years seedlings</li> <li>● Last chance to order your heritage kumara tupu</li> <li>● Prepare kumara beds. They prefer shallow soils with a hard pan 20-30cm under the surface, so do not double dig these beds.</li> <li>● Last month to prepare seed raising mix</li> <li>● Time to plant your early potatoes now to avoid psyllid (make sure you have frost cloth and hoops to keep frost off them as they emerge.</li> </ul>	<p>Good time to plant citrus.</p> <ul style="list-style-type: none"> <li>● Mulch all young trees before the grass is competing for moisture and nutrients.</li> <li>● Divide and re-sow primroses in the orchard herbal</li> <li>● Good time to plant forest garden support species</li> </ul> <p>Good time to read <b><u>Design Your Own Forest Garden</u></b> in readiness for planting support species seeds over next two months for Autumn planting</p>

MONTH	MOON PHASE	GARDEN	ORCHARD
Sept 13th 2015	New Moon	<p>Loads of pricking out seedlings as needed.</p> <ul style="list-style-type: none"> <li>Continually preparing beds as weather and moisture levels allow</li> <li>Plant all summer flowers requiring heat for germination i.e. <b>Sunflowers</b>, <b>morning glory</b>, <b>gaillardia</b>, <b>zinnias</b>, <b>cosmos</b>, <b>marigold</b>, <b>love lies bleeding</b>, <b>nasturtium</b>, and <b>dahlia</b></li> <li>In warm areas plant all main crop veges (<b>beans</b>, <b>summer squash</b>, <b>pumpkins</b>, <b>tomatoes</b>, <b>cucumbers</b> for pickling and eating) into trays and prick out and transplant as ready</li> <li>Plant <b>lettuce</b>, <b>tampala</b>, <b>rocket</b>, <b>mizuna</b>, <b>basil</b>, and all other summer greens and veges requiring warmth into trays and prick out and transplant as required</li> <li>In warm areas plant your summer grain crops into trays but broadcast sow over the entire tray leaving enough room for the seedlings to grow for 3-4 weeks and then transplant directly into the beds at diagonal spacings recommended on the seed packets <b>amaranth</b>, <b>quinoa</b>, <b>millet</b>, <b>sorghum</b></li> <li><b>Grains</b> can be direct sown (scatter sown or even sown in rows) into beds but you will have to cover from the birds and getting the density optimal is quite tricky. The spacings recommended on our packets are many years of experience to obtain maximum yields</li> </ul> <p>Watch perennial Vegetables</p> <ul style="list-style-type: none"> <li>Asparagus</li> <li>Globe Artichokes</li> <li>Seakale</li> <li>Rhubarb</li> </ul>	<p>Last chance to sow seeds and ground cover herbs under fruit trees before it dries out.</p> <ul style="list-style-type: none"> <li>We stock excellent <b>orchard herbal ley packs</b>. Our herbal ley does not contain multiple brassica species as other mixes do (to avoid potential crossing with seedcrops in the garden!) and it does contain Clover White, Red, Subterranean, alfalfa, chicory, borage, phacelia and plantain.</li> </ul>




MONTH	MOON PHASE	GARDEN	ORCHARD
Sept 21st 2015	First Quarter 	<p>Keep planting salad greens, lettuce, tampala, basil, mizuna, etc every month</p> <ul style="list-style-type: none"> <li>• Foliar feed with <b>EF: Vegetative Foliar</b> if plants are in their early growing stages, or <b>EF: Reproductive Foliar</b> if they will soon be flowering or setting fruit or seed before full moon</li> <li>• Major time for bed preparation and taking care of seedlings and newly transplanted seedlings</li> <li>• Continue transplanting out into beds all your seedlings</li> <li>• Quite a few of your perennials will be feeling the ground warming and will be sending up their first shoots (e.g. <b>echinacea</b>, stevia, <b>bergamot</b>) and may need checking for slug and snail damage (especially stevia).</li> </ul>	<p>Watch for water stress and try to avoid it by careful watering, time watering will be time not spent dealing with pests and other associated problems</p> <ul style="list-style-type: none"> <li>• Watch for Bronze beetle attack on apples, feijoas, and all trees that are likely to be water stressed. You may need to spray <b>Koanga Psyllid Solution</b>. You will do a better job of stopping the next few generations as well</li> </ul>
Sept 28th 2015	Full Moon 	<p>Good time to foliar feed or spray</p> <ul style="list-style-type: none"> <li>• Major time to clean out beds, make compost and clean up!</li> <li>• Direct sow <b>carrots</b> , <b>beetroot</b>, <b>mangle beet</b>, <b>turnips</b>, <b>scorzonera</b>, <b>salsify</b>, <b>daikon</b> and <b>parsnips</b></li> <li>• Plant main crop potatoes (onto comfrey and or seaweed), <b>Jerusalem artichokes</b>, <b>Ulluco</b>, <b>yams all tubers and root crops</b></li> <li>• If your <b>waterchestnuts</b> have not been planted into a tub or plastic lined growing trough then do it now. They need 20cm of water fed with lime and cow manure.</li> <li>• Plant kumara when the Pipiwharoroa puts a tail on his call</li> <li>• Continue bed preparation, loads of work with snail patrols</li> <li>• Keep all planted beds weed free and aerated every week if possible on the waning moon</li> <li>• If your <b>dahlia</b>s over wintered in the ground then now is the time to lift, divide and replant</li> </ul>	<p>Good time to foliar feed for health</p> <ul style="list-style-type: none"> <li>• Moisture levels critical for shallow roots. If any of your trees are looking unhappy then carefully check their roots: are they too dry, are they repelling the water you're putting on because they are too dry?</li> <li>• Citrus and Feijos, guavas, kiwi fruit and subtropicals have shallow roots, check them carefully.. water stress will attract bronze beetles</li> </ul>



MONTH	MOON PHASE	GARDEN	ORCHARD
Oct 5th 2015	Last Quarter 	<p>Continue pricking out seedlings and transplanting</p> <ul style="list-style-type: none"> <li>• Mound up earlier plantings of potatoes, critical that you either mulch or mound up well to obtain heavy crops and avoid potato worms, also make sure you are growing high brix potatoes to avoid both blight and the psyllid wasps. If your potatoes are under 12 brix you will very likely attract both problems.</li> <li>• Begin watching for psyllids, under leaves, deter with <b><u>Koanga Psyllid solution</u></b></li> <li>• Major bed clean up and compost making. See the Koanga Compost Booklet.</li> <li>• Good time to weed</li> </ul>	<p>Dig up comfrey root, cut into 3-5 cm pieces and plant into seedling tray to get roots before transplanting into orchard. If soil conditions are good you can directly plant the pieces of root straight into the ground now.</p> <ul style="list-style-type: none"> <li>• Make sure all the irrigation systems are working well now</li> <li>• Weed and feed comfrey borders and barriers, pull back kikuyu if this is a kikuyu barrier</li> <li>• Cut back canna lily borders so they will come away strong as barriers for comfrey, they will grow better if fertilised at this point too</li> <li>• If it's warm and the grass is growing well in the orchard then scything the grass will mean you can mulch your fruit trees. Weed eating the grass does not provide usable mulch, scything does.</li> <li>• Play special attention to composting, manuring and mulching citrus, feijoas and guavas at this time</li> <li>• Last chance to plant Forest Garden support species now</li> </ul>

MONTH	MOON PHASE	GARDEN	ORCHARD
Oct 13th 2015	New Moon	<ul style="list-style-type: none"> <li>• Loads of pricking out seedlings as needed</li> <li>• Continually preparing beds as weather and moisture levels allow</li> <li>• Plant all Summer flowers requiring heat for germination, ie. sunflowers, <b>morning glory</b>, gaillardia, prices feather, <b>zinnias</b>, <b>cosmos</b>, marigold, <b>love lies bleeding</b>, <b>tithonia</b>, nasturtium and <b>dahlia</b></li> <li>• Plant all main crop veges (beans, summer squash, pumpkins, tomatoes, cucumbers for pickling and eating) into trays and prick out and transplant as ready</li> <li>• Plant lettuce, tampala, rocket, mizuna, basil, all other Summer greens and veges requiring warmth into trays and prick out and transplant as required</li> <li>• Plant your grain crops into trays but broadcast sow over the entire tray, leaving enough room for the seedlings to grow for 3-4 weeks and the transplant directly into the beds at diagonal spacings recommended on the seed packets; amaranth, quinoa, millet, sorghum</li> <li>• Grains can be direct sown (scatter sown or even sown in rows) into beds, but you will have to cover from the birds, and getting the density optimal is quite tricky. The spacings recommended on our packets are many years of experience to obtain maximum yields.</li> </ul>	<p>Check moisture levels under young trees and water where necessary</p> <ul style="list-style-type: none"> <li>• Last chance to mulch deciduous orchard areas</li> <li>• Check all apples trees for woolly aphid (white furry aphids in the cicada damage on branches). Woolley aphids is a sign of water stress ad mineral imbalance, you can fix both... short term solution could be <b>EF:Combo 12 Powder</b></li> <li>• Bronze beetles on feijoas, apples, pears indicate water stress, may need spray of <b>Koanga Psyllid Solution</b> and and water well</li> <li>• Mulch berry fruits, possibly install drip irrigation before mulching, and organise bird netting</li> <li>• Time to clean up, mulch and replant any gaps in the subtropical orchard</li> <li>• Time to establish initial plantings (Abyssinian bananas, acacia pravissima) if a subtropical orchard is a future plan</li> <li>• Fertilise and mulch and water if necessary bananas to get strong suckers</li> <li>• Use <b>garden shark</b> to cut off all black leaves and dead growth throughout subtropical orchard and mulch</li> </ul>
Oct 21st 2015	First Quarter 	<p>Keep planting salad greens every month Foliar feed before the full moon: <b>EF: Vegetative Foliar</b> or <b>EF: Reproductive Foliar</b> depending on growth phase of plants</p> <ul style="list-style-type: none"> <li>• Major time for bed preparation and taking care of seedlings and newly transplanted seedlings</li> <li>• Continue transplanting out into beds all your seedlings</li> <li>• Quite a few of your perennials will be feeling the ground warming and will be sending up their first shoots (eg. Echinacea, stevia, bergamot) and may need checking for slug and snail damage (especially stevia).</li> </ul>	<p>Keep up the watering</p> <ul style="list-style-type: none"> <li>• Check for pest problems, spray if necessary</li> <li>• Remove any unwanted suckers from berry fruit</li> <li>• Watch for breaking branches as early fruit swells, may need to thin fruit or prop up branches, especially the <b>Orion peach</b> and <b>Marabella plum</b></li> <li>• Chop up flowering Abyssinian bananas for mulch around subtropical orchard</li> <li>• Feed citrus to encourage strong healthy growth at this time</li> </ul>

MONTH	MOON PHASE	GARDEN	ORCHARD
Oct 28th 2015	Full Moon 	<p>Foliar feed all veges.</p> <ul style="list-style-type: none"> <li>• Liquid feed ground around any plants that need a strong boost.</li> <li>• Plant kumara tupu.</li> <li>• Plant main crop potatoes onto trenches of wilted comfrey leaves (planting them this late will mean you need to be super vigilant in <b>dealing with psyllids</b>)</li> <li>• Plant <b>Jerusalem artichokes</b>, <b>Chinese artichokes</b>, <b>yams</b>, <b>yacon</b>, aniu,</li> <li>• Plant <b>beetroot</b> and <b>carrots</b>, <b>daikon</b>, <b>turnip</b>, <b>scorzonera</b> and <b>salsify</b></li> <li>• More transplanting</li> <li>• Mulch any beds that are ready</li> <li>• Harvest flowers, herbs and seeds for drying</li> </ul>	<p>Keep watering and watch for pest/disease problems.</p> <ul style="list-style-type: none"> <li>• If there is still moisture in the ground there will be loads of grass that can be scythed to use as mulch on the garden, berry beds, perennials etc.</li> </ul>
Nov 4th 2015	Last Quarter 	<p>Weed, mulch and water.</p> <ul style="list-style-type: none"> <li>• Continue pricking out and transplanting.</li> <li>• Watch carefully for insects/diseases and learn what they are, how they impact you and what the best ways are to manage them.</li> <li>• Continue harvesting flowers and herbs for drying.</li> <li>• Mound up potatoes</li> </ul>	<ul style="list-style-type: none"> <li>• Good time to plant citrus</li> <li>• Mulch all young trees before the grass is competing for moisture and nutrients</li> <li>• Divide and re-sow primroses in the orchard herbal ley (also polyanthus).</li> </ul>
Nov 12th, 2015	New Moon	<p>Check for water stress - the less stress, the less pest problems</p> <ul style="list-style-type: none"> <li>• Transplant last of spring plantings - late crop <b>tomatoes</b>, <b>beans</b>, <b>corn</b>, <b>basil</b>, <b>courgettes</b>, <b>cucumbers</b> and <b>leeks</b></li> <li>• Watch out for young, black shield bugs - use <b>Koanga Psyllid Solution</b></li> <li>• Take care of liquid fertiliser barrels; keep stirred and refilled with comfrey, manure, seaweed etc. Tomatoes, corn, pumpkins may need a boost now</li> <li>• Plant seed into trays for late summer harvesting off dwarf and climbing beans, courgettes, carrots, beetroot, lettuce (tree lettuce will take the heat), <b>basil</b>, <b>tampala</b>, short season corn (if you are in an area with a long summer) and <b>celery</b></li> </ul>	<ul style="list-style-type: none"> <li>• Check moisture levels under young trees and water where necessary</li> <li>• Mulch young deciduous orchard trees</li> <li>• Bronze beetles on fejoas, apples or pears indicate water stress.</li> <li>• Mulch berry fruits and organise netting</li> <li>• Time to clean up, mulch and replant any gaps in the subtropical orchard</li> <li>• Time to establish initial plantings (Abyssinian bananas, acacia gravissima) if a subtropical orchard is a future plan</li> <li>• Fertilise, mulch and water bananas if necessary, to get strong suckers</li> <li>• Soak ground under avocados with fish and phyter to prevent phytophthora</li> <li>• Use garden shark to cut off all black leaves and dead growth throughout subtropical orchard and mulch</li> </ul>



MONTH	MOON PHASE	GARDEN	ORCHARD
Nov 19th 2015	First Quarter 	<ul style="list-style-type: none"> <li>Prick out and transplant seedlings, make sure you have loads of companion flowers going into the vege garden, zinnias, sunflowers, cleome, marigolds, bedding dahlias, cosmos, love lies bleeding, gaillardia</li> <li>Basil, alyssum and classic zinnias are great companions for tomatoes, plant them now</li> <li>Continue foliar feeding with <b>EF: Vegetative Foliar</b></li> </ul>	<p>Watch moisture levels, check young trees carefully</p> <ul style="list-style-type: none"> <li>Watch for bronze beetle damage, pear slug and cicada damage</li> <li>Foliar spray with seaweed and vermiliquid</li> </ul>
Nov 26th 2015	Full Moon 	<ul style="list-style-type: none"> <li>Foliar feed all veges with seaweed, fish/phyter, vermiliquid etc. if necessary.</li> <li>Liquid feed ground around any plants that need a boost</li> <li>Plant kumara tupu</li> <li>Plant main crop potatoes onto trenches of wilted comfrey leaves, will need to protect from psyllid</li> <li>Plant Jerusalem artichokes, Chinese artichokes, yams, yacon, aniu</li> <li>More transplanting</li> <li>Mulch any beds that are ready</li> <li>Harvest flowers, herbs and seeds for drying</li> </ul>	<ul style="list-style-type: none"> <li>Keep watering and watch for pest/disease problems</li> <li>If there is still moisture in the ground, there will be loads of grass that can be scythed to use as mulch on the garden</li> </ul>
Dec 3rd 2015	Last Quarter 	<ul style="list-style-type: none"> <li>Prick out any seedlings as necessary</li> <li>Keep up watering</li> <li>Carefully observe all plants - they'll tell you if they need some more water or nutrients, help with pest control, tying up or more space. This is a very important time to take good care of <b>tomatoes</b> and <b>peppers</b></li> <li>Harvesting lupin seed</li> </ul>	<p>You should be able to have a break for a few weeks now if you're up to date!</p> <ul style="list-style-type: none"> <li>Time to begin picking the fruit and enjoying the season!</li> </ul>
Dec 11th 2015	New Moon	<p>Water carefully, using fingers to make sure that the ground is getting wet where you need the moisture.</p> <ul style="list-style-type: none"> <li>Water for shield bugs or spray <b>Koanga Psyllid Solution</b></li> <li>Harvest garlic and onions, if ready</li> <li>Weed and prepare beds, aerate surface of all unmulched beds with hoe, <b>niwashi</b> etc.</li> <li>In warm weather sow late crops of <b>cucumbers</b>, <b>courgettes</b>, <b>beans</b> and <b>basil</b></li> <li>Sow <b>peas</b>, <b>rocket</b> and <b>corriander</b> in shade</li> <li>Plan and sow seed for Autumn crops like <b>cabbage</b>, <b>broccoli</b>, <b>cauliflower</b>, <b>silverbeet</b>, <b>spinach</b>, <b>celery</b>, <b>carrots</b>, <b>beetroot</b>, <b>endive</b>, <b>brussels sprouts</b>, <b>kale swedes</b>, <b>turnips</b> and <b>radish</b>, <b>daikon</b></li> <li>Continue regular foliar feeds of gross feeders with liquid comfrey or liquid manure, and foliar feeding with fish, seaweed or growth foliar</li> <li>Transplant leeks into garden for Autumn, Winter use</li> </ul>	<ul style="list-style-type: none"> <li>Check young trees carefully for moisture stress. Water stress now will mean damage from cicada, shield bugs, pear slug, woolly aphids and die back on young trees</li> <li>Watch fruit carefully and net trees where you need to. We use 10m<sup>2</sup> of knitted bird netting, raised over the trees with a bamboo pole on two corners of the netting and pulled in together underneath</li> <li>Watch carefully for branches of stone fruit showing signs of silver leaf - often just one limb of a tree will have silver leaves. Now is the time to cut that limb off, burn it and inoculate the tree with Trichopaste and or Tricho dowels</li> </ul>

MONTH	MOON PHASE	GARDEN	ORCHARD
Dec 19th 2015	First Quarter 	Check water requirements <ul style="list-style-type: none"> <li>● Check tomato and pepper maintenance</li> <li>● Plant catch crops for shield bugs (i.e. mustard)</li> <li>● Foliar feed three days before full moon</li> <li>● Prick out and transplant as necessary</li> </ul>	Get out "Harry the Hawk" kites and nets for fruit trees as fruit ripens <ul style="list-style-type: none"> <li>● Bananas need feeding and watering now, de-sucker all banana suckers after the first two under each fruiting palm; failure to do this means smaller bunches and too many trunks!!</li> <li>● Check moisture levels on all trees especially dwarf apples, dwarf pears, feijoas, young trees, kiwi fruit and citrus - all have shallow roots and hate drying out. Brown leaves, bad pear slug, bad cicada damage and serious bronze beetle damage are all symptoms of water stress</li> </ul>
Dec 26th 2015	Full Moon 	<ul style="list-style-type: none"> <li>● Water as required, especially just around the full moon as the plants are really wanting to grow</li> <li>● Foliar feed three days before full moon</li> <li>● Keep up tomato and pepper maintenance</li> <li>● Spray neem oil for shield bugs. Spraying now will stop the next generation hatching</li> <li>● Remove seeds pods from sweet peas to keep them flowering</li> <li>● Plant bulbs in garden beds orchard or pots Dead head <b>dahlias</b> too keep them flowering</li> <li>● Harvest early potatoes</li> </ul>	Watch for water stress and water to avoid stress. <ul style="list-style-type: none"> <li>● Make a careful notes of when all your fruit ripens so that you know where the gaps are for future plantings</li> </ul>