

## TIM GENT

# **CAMPFIRE COOKING**

Photographs by Tim and Susannah Gent

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#### **Dedication**

While the words that follow are mine, along with any errors, much of what appears in this book is the result of teamwork. The enjoyable task of producing the photographs is the obvious example, with the better images often showing me, because they were taken by Susannah. The collaboration strikes deeper than that though. I might cook out there, and often do, especially when it comes to baking bread or anything to do with fish, but the real culinary skills lie elsewhere in the partnership. Even beyond the warmth of the fire, and the preparation and creation of each anticipated meal, so much of what will be found between these covers is the product of that collaboration, from the planning undertaken before a camping trip even takes place, through the packing of kit and ingredients, to the collection of wood to fuel that all-important fire. It doesn't have to be like that of course. Each rewarding element of campfire cooking can be carried out perfectly successfully by the solo camper. I'm just extremely fortunate to be able to share it all.

#### About the Author

Growing up on a farm, Tim has enjoyed an outdoor life since childhood. Subsequent work in forestry conservation and archaeology has added to an understanding and ever deeper love of the land. Camping has been a constant feature over the years, with tents pitched from sea level to mountain ridge, from the Mediterranean coast to Arctic Scandinavia.

Writing about fishing, hillwalking, canoeing, camp craft and camp cooking, the first of Tim's many magazine articles was published in 1990. He is a regular contributor to *Bushcraft and Survival Skills*, *Outdoor Adventure Guide* and *The Great Outdoors*, and has written on various subjects for magazines in Europe, Australia, Canada and the United States. His book, *Canoe Camping*, was published by Pesda Press in 2014.

Tim and Susannah met while camping and they have been pitching a tent at the end of a day's travel ever since. When not under canvas, Tim and Susannah live in Devon, England, midway between Dartmoor and the Atlantic coast.



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I'm certain the greatest camping satisfaction will come from preparing a meal over a wood fire.

# Why Cook Over a Wood Fire

Heat radiates from a deep bed of glowing orange embers, both light and warmth enhanced by the advancing dusk. A lump of charcoal, ashimmer and bright, jumps slightly with a dull pop, before settling again amidst the downy grey ash at the fire's edge. Time for more fuel. Time for another stoke.

Almost as soon as the slim section of split beech meets the hot coals, tiny flames begin to shiver and creep along its flank. The log shakes just once, a small shower of sparks lifting into the cool evening air, before the superheated gasses take a proper grip, the fire once more ablaze. A hand reaches forward into the light, gripping a handle, sliding the battered steel pan at its end away from this resurgent heat. Inside, a fast rolling boil drops to a simmer.

So with our meal nearly ready, prepared over this satisfying blaze, it's time for an introduction. But rather than begin with the usual overview, and a description of what this book is about, I'm going to start from the other direction. Many might view cooking over a fire as a retrograde step, an odd and potentially uncomfortable rejection of easier, modern and more efficient methods. They will see only a questionable act, imposed either through circumstance and lack of options, or chosen because of some rose-tinted view of a better and more enlightened past. These are not my experiences, or the reasons that inspire me to collect firewood as mealtime approaches. As a result, this isn't a book about cooking over a wood fire as a result of necessity, being forced into campfire cooking in order to survive some



Because it's enjoyable, deeply satisfying, versatile and efficient... and also a great way to cook good food.

desperate and challenging situation, even if it might be a sensible response when other options are unavailable. It's not really about engaging with the past either, an attempt to reconnect with those millennia-long practices of our ancestors, however worthy that aim. Nor is it much concerned with the fact that wood-fired cooking has become rather fashionable of late, although I have to admit I'm very pleased more people are likely to be giving it a go as a result.

Instead, this book is about choosing to cook over a fire when camping because it's fun. It's about making the decision to use wood as a fuel to build that fire, because it's enjoyable, deeply satisfying, versatile and efficient, and because the whole process is environmentally sound and just about free. Importantly, for what otherwise would be the point, it's because cooking over a fire is also a great way to produce good food.

What's more, the whole process of campfire cooking really can be a lot easier than you might imagine, at least with a little guidance... and that's the reason for this book.

Of course, unless you were once in the Scouts or Guides, the chances are that preparing food over an open fire is going to be something completely new. For many, the concept of cooking in a camp at all will be a novel and slightly alarming prospect. For those who have already given it a go, the process is likely to have involved a bottle of gas. A pot sits on a stovetop. A knob is turned. The food inside is heated. Compared to the campfire, with its complex and alien contraptions, not least that worrying pile of burning wood, all this does seem reassuringly familiar. This book aims to show that with the right information and guidance, and the correct kit, cooking over what might at first seem a disconcerting wood fire can become just as natural.

True, at first glance, the alternative may seem very convenient, and in many ways it is. When one of those bottles of gas runs out, replacing it with another is almost effortless – assuming you have a replacement that is. Otherwise it's a trip in to town, or at least the nearest garage.

When Susannah and I need more fuel, we simply turn to the nearest copse or wood, even the beach stretched out before our tent. There, usually in a matter of only a minute or two, and collecting only a small amount of dead windfall or flotsam, we'll have a fresh supply. Unlike that gas though, our new heat source will be free.

In releasing its energy, and providing that useful heat, our wood fuel will also be clean. The carbon dioxide from that canister of gas was trapped below ground millions of years ago, until released again, that is, first by drilling, then by the burning of that fuel. The same rather troublesome gas from the donor tree was captured over only the last few decades, at most a century or two; carbon dioxide that the dead tree would have released anyway as it rotted away over the next few years. Nothing of additional concern is being added to our hard-pressed land or air.

Once a few meals have been prepared, the gas-fired camper is also left with a metal container. Depending on location, circumstance, and the attitude of the camper, this may or may not be recycled. At the end of our cooking sessions, once our meal is eaten, the pots, pans and dishes washed and packed away, Susannah and I have ash. With no effort, the remaining nutrients can be offered back to the local woodland straight away. If cooking over gas really is easier, and I have my doubts about that too, at what cost do we obtain that ease and simplicity.

Then there's that all-important matter of fun. And while I would far rather see someone spending time outside, cooking over whatever fuel they fancy, I'm certain the greatest camping satisfaction will come from preparing a meal over a wood fire. It's almost in our DNA. I mentioned just now that this book is not designed to revel in the past, but there's no denying an extremely rich heritage of cooking over wood that stretches back over many millennia in almost every culture. Only this week I camped with someone whose grandmother had cooked over wood, or at least peat, throughout her life. Just the slightly smoky taste of bread toasted over a fire takes her straight back to childhood.



That bottled gas.



A small shower of sparks lifts into the cool evening air.

Heat radiates from a bed of glowing orange embers.



Of course that enjoyment can only really be experienced once a genuine confidence in the whole process is obtained. I hope that by the end of this book you will have gained the self-assurance needed to explore the countless benefits, culinary and aesthetic, to be had from cooking over a wood fire. I've even included some recipes.

For Susannah and myself, a wood fire is the normal heat source we employ to cook while camping. In our minds the two go together quite naturally, and we camp quite a bit. We've been doing it for a fair while too. We even met at an informal campsite, one where wood-fired cooking was the norm. This isn't to say that we always use wood. Local conditions, and even local regulations (see page 79 How To Use a Wood Fire), mean we can be required to use one of those bottles of gas. Some areas, for environmental or safety reasons, or simply to avoid interfering with other people's camping enjoyment, are just not suited to wood-fired cooking. Even so, we are fortunate to experience numerous opportunities every year to seek out those places where it is possible and allowed. In fact, it's a principle reason we choose to camp in these particular spots in the first place.

Those who have read about our travels before will know that much of our camping is carried out at the end of a canoe journey, and while this isn't the place to start extolling the many benefits of a canoe as a camping support vessel, this experience is relevant. Using such an excellent load carrier, Susannah and I are not really restricted in what we can transport into the wild. As a result, the cooking kit we take canoe camping, and the methods used around our campfire, can be translated directly to pretty much any situation in which you find yourself setting out in a self-propelled vehicle, whether a bicycle, kayak or rowing boat. In fact, whatever muscle-powered method you might choose to carry your kit into the wild.

Because so many of our canoe voyages take place at the end of a van drive, occasionally quite long van drives, the experiences accumulated on these journeys are also relevant to any situation where a motorised vehicle takes the strain. Many aspects of wood-fired camp cooking can change quite a bit with all the additional storage space offered by a van or truck. If you want them to change that is.

At the other end of the camping spectrum, I don't intend to forget the pedestrian. Although a large proportion of our camping is accompanied by a canoe, or carried out from the back of a van, we often camp as backpackers too. On these expeditions we also cook over a wood fire, or at least we do whenever possible. As a result, this guide will cover the alterations to kit and methods required to make the whole thing practical for anyone setting out with a well-stocked rucksack.

Mind you, while this book approaches wood-fired cooking from the perspective of the camper, there's absolutely no reason why the methods discussed in the following few chapters cannot be applied with equal success by anyone wishing to cook over a fire. It's not a requirement to have a tent pitched in the background. Whether you choose to prepare a meal in your back garden, at the beach, or anywhere else you can light a fire, the uplifting process is just the same.



No tent... just the enjoyment of a fondue on the beach, cooked over a wood fire.



Two people cooking, one looking after the food, the other the fire.

# How To Cook Using a Wood Fire

Once ingredients have been chosen and prepared, cooking success is pretty much all about heat control. Yet while twisting a knob on a gas stove does seem very simple, adjusting heat when using a fire can be as easy as sliding a pot from one side of the blaze to another – really. Other than that single movement, or variations on it, the only other aspect of temperature control to consider is keeping the fire fed appropriately. Before concerns set in, this can be regulated with as little trouble as varying the frequency you add fresh fuel.

With this pair of interlinked tasks, it's here I'll suggest that wood fire cooking is often made a lot easier with two people. Where a brace of campers share the experience, one outdoor chef can focus on the cooking (sliding that pan to and fro, and keeping an eye on what's in it), while the other tends the fire (adding the occasional stick). Using a fire to cook may seem fraught with difficulty, but the whole thing really is very quick and easy to pick up. This isn't to say that you need two people, and I've often cooked quite happily over a fire when alone, as have many others, but it does simplify things, especially at the learning stage.

Going back to that temperature control bit again – as it is key to the whole process – we're going to start by assuming you have your fire going properly. Until sure of this important detail, you'll just be making hard work for yourself. All this cooking over burning wood might be simple, but if it's also a new experience, there'll be enough to think about without struggling unnecessarily to keep a hesitant fire alive too.



Scandinavian kitchen design.



A bed of burning coals will represent the heart of your cooking fire.



It's a lot easier to concentrate on the cooking with a good pile of wood ready to use.

The first thing to do then, once your fire is properly lit, is to let it be for a while. Leave at least ten or fifteen minutes during which you do nothing but stoke gently as the fuel burns through. This very important pause is needed to let your fire bed in.

What we are after, before any cooking takes place, is the development of a good layer of glowing embers. This bed of burning coals will represent the heart of your cooking fire. These ember beds can be used either on their own, when a low even heat is needed, say for grilling or the simmering of a stew, or to provide quick ignition to any new fuel when a burst of increased heat is required. The longer a wood fire burns, the deeper and more enduring that bed of embers will become and the more even the temperature will be.

If nothing else, the ground below your fire will probably be cold. It's also likely to be quite damp, possibly very damp. It can therefore take quite a while for your fire to warm things through and dry them out properly, and both will be needed before your fuel is able to burn efficiently. If we have the time, Susannah and I will let a fire mature for as much as half an hour or more before bringing in a pot.

My other assumption is that you have a good supply of dry firewood cut, ready to hand, nearby. Life around a campfire, at least a life that includes a good meal, really is made so much easier if you can concentrate on the fire, and not its fuel needs. Yes, once experienced, and if operating in some helpful wood-filled environment, you probably can manage both the stoking and the gathering of fresh fuel at the same time, but you're really only making life unnecessarily difficult for yourself when starting out. Remember, you're soon going to be engaged in that all important cooking too. Much better, before making any start, to have built a good pile of fuel, or even a couple of piles, ready sorted, chopped and split.

So, the fire is lit, and there you are basking in the warmth of those glowing embers, a generous heap of assorted sticks and logs stacked nearby. Now to turn a campfire into a cooking campfire, and bring in a pan.

### Pot and pan supports

For many campers, this is where producing a meal over a wood fire can suddenly begin to look rather worrying. The whole thing is so very different from what you're probably used to after all. Cook in a kitchen, and there will be somewhere stable and flat to place your frying pan or casserole pot. Now, crouched by your fire, you're faced instead by flames dancing over a tumble of sticks, split logs and glowing embers. Not on the face of it a very friendly place to try to rest your cooking utensil. What's needed at this point is something to hold your filled saucepan or billycan safely in place. Fortunately, mankind first put their collective minds to this problem many centuries ago. This means there are simply dozens of ways to approach the problem successfully. We'll focus on just a few of them.

It's a slight over-simplification, but campfire cooking has evolved to provide us with pan support systems that can be divided into two general camps (I think there's a pun there); those that support the cooking vessel from below, and those that suspend the pot over the fire from above. In the first group we have fire irons, trivets, oven shelves and camp ranges; in the second, such devices as tripods and various forms of cranes and frames, often constructed from wooden poles.

In addition to suspended cooking vessels, we then have a collection of detached setups, in which the cooking takes place in a freestanding unit. The reflector oven and variations on the Finnish Muurikka fall into this category, but it also includes the versatile Dutch oven, which can be used either on its own, or propped or suspended using a number of the systems just listed.

It has to be admitted that the methods described below make our preferences pretty clear. That's deliberate. Why suggest an arrangement we're not completely happy with after all. Mind you, even this selection isn't that cut and dried. As already mentioned, what may suit a camper heading into the wild in a large truck or even a large canoe, just isn't going to be viable for a cyclist, let alone the backpacker. So the options are not only discussed from the perspective of their cooking merits, but also their suitability to the way you might wish to travel.



Our fire irons, propped on a pair of stones.



A small kettle and a large pan, both supported securely on fire irons at the same time. Just push the irons closer together at one end.

Looking at the systems that support a pot or pan, we'll begin with that first group, the structures that hold our cooking vessel from below.

#### **Fire irons**

As Susannah and I are so keen on them, and they therefore feature fairly prominently in both the kit list and photos, I'm going start this fascinating subject by picturing you setting that pan down on a pair of fire irons.

Fire irons have many advantages. Not least, they can provide a cooking setting that's likely to most closely resemble the one you're used to at home. When I mention sliding a pan from one side of your fire to another to control heat, this is the system I have in mind. Propped side by side on two suitable stones, one to either side of your burning fuel, fire irons provide a very simple yet surprisingly stable support for a wide range of cooking vessels. By adjusting the distance between the two irons – a simple matter of sliding them a little closer together or further apart – anything from a kettle or billycan with a small base, to pretty substantial and hefty cast-iron casseroles can be held, even at the same time. Few truly portable cooking pan support systems are so versatile and reliable. For their weight, none can carry heavy pots with such security.

No more than those two irons need to be carried. The only other requirement is something to support them, and a pair of suitable stones can almost always be found at your chosen campsite. For obvious reasons, two brick-shaped rocks are best, but where only more randomly proportioned lumps of rocks are available, and this is often the case, a hollow can usually be dug in the ground to either side of your fire to provide a stable setting for each stone. In situations in which only a single stone with a broad flat surface can be found, it is still possible to prop the irons. These just lie wide apart on the flat stone, with the other ends tight together on whatever else you can find. The choice of pan sizes will just be restricted slightly by the arrangement.

All is not lost even in situations where no stones can be located. In fact, a pair of logs, about 30cm (1 foot) or so in length, cut from a section of green wood will usually hold out against combustion for long enough to cook a meal, and often provide a more stable setting than any stone. Once the cooking is done, and the fire irons lifted, these often partially charred logs can simply be added to the bed of embers for a little slow burning post-meal warmth.

Whatever support you choose, aim to place the fire irons about 12–15 cm (5–6 inches) above ground level. This will leave room for your fire (remember, I have advised that only thin split wood or sticks are required), while also allowing the base of your pots to sit close to the heat. Adjustments can always be made during the cooking process by simply substituting the supporting stones or logs with taller or shorter versions. Alternatively, you could sink what you have in slight hollows, or mound up a little soil, sand or gravel if you need to lift them. Sometimes, when I need to raise the irons only slightly, I just slip a stick or thin section of split log under the irons on top of one or both of the supporting stones.

Advantages: Simple. Robust. Can carry heavy pots. Can carry pots of differing sizes at the same time.

**Disadvantages:** The irons are a probably too heavy for backpacking use.

#### Oven shelves

A wire shelf from a household oven or grill can also make a very useful support for camping pots and pans. Being pretty lightweight they can usually be carried without trouble by a backpacker, cyclist or kayaker. For those keen to keep weight as far down as possible, some fairly skimpy versions can often be found in the oven grill pan. Most these days are chromed, and therefore easy to clean.

Propped on suitable stone, about 12–15cm (5–6 inches) off the ground, this will give room for a fire underneath, while still keeping the pot base close to the heat. Three stones will always provide a more stable setting than four. Beware though. Unlike



Fire irons propped on a pair of damp lakeside logs.



An oven shelf supporting a pan.



A small oven shelf, propped on stones, and supporting three pans.



A trivet in use, alongside a camp crane.

the fire irons, which tend to stay put, chromed oven shelves are rather slippery, and therefore have a slightly inconvenient penchant for sliding about. It is worth ensuring therefore that the whole setup is as steady as possible before adding a cooking pot. For this reason, pointy supporting stones, wedged a little between the wires of the shelf, are often better than flatter ones.

While rarely very big, an average oven shelf is often large enough to provide room for three smallish pans. If you really do like this system, and have the space and carrying capacity to cope, some really quite substantial shelves lurk in some of the more upmarket ranges.

Wire oven shelves can also be used in conjunction with fire irons and trivets (see below) to provide the perfect grilling surface. I often slide one over our irons to cook fish.

**Advantages:** Simple. Robust. Often very light. Can carry more than one pot at a time, and pots of differing sizes.

*Disadvantages:* If chosen for their light weight, often not very big (but still usually large enough for two modest pots). Without care, sometimes a little unstable.

#### **Trivet**

While still on the subject of camping kit that hold pots and pans from below, these little devices combine a flat pot supporting surface and the legs in one simple package. Trivets are very useful items of kit for the backpacker, the best being light and fully collapsible, although they are obviously limited to one pan or pot.

They can though support a frying pan. A trivet can of course be teamed up with other supports such as the tripod or cantilever system to allow two or more pots to be employed at once. As with the fire irons, trivets can also be used to support a small wire oven shelf, thus allowing a backpacker to grill.

Our trivet, made by our daughter Miranda, has pointed legs. This makes this particular model very useful with fires laid on soft ground, when the height of the trivet platform over the fire can be adjusted simply by altering the depth they are pushed in.

Advantages: Simple. Robust. Often pretty light. Can be used to fry. Can be used to grill with a wire oven shelf.

Disadvantages: Can only carry one pot at a time.

#### **Tripod**

In addition to moving it sideways, the other way to control the heat in your pot is to shift the container up or down, closer to or further away from the fire. A tripod, that suspends the cooking vessel from above, allows you to do both. This setup is also great for the backpacker, as the required materials can usually be found easily enough where you choose to stop and camp. Therefore nothing need be carried but a pot or kettle.

There are different ways to achieve a workable tripod, but when I want to set one up I take three lengths of straight wood, usually hazel, about 180cm (6 foot) long, and lash them together with stout cord (a spare boot lace works well) close to one end. The feet at the other end can then be spayed out to the side of the fire, producing a stable frame, with the apex directly over the heat source.

I then hang a thin wire double-ended hook (I usually make mine from a clothes' hanger) in the lashing. A length of light chain and can then be hung by a link on this wire, with a further wire hook taking the pot at the bottom. By choosing which chain link I catch at the top hook, I can adjust the pot height above the fire by as little as 0.75cm (1/4 inch) at a time.

Depending on preference, and availability of materials, you can of course employ other systems to suspend your cooking vessel, including wire from top to bottom,



A tripod made from three lengths of hazel.



A bent wire hanger, hooked into the tripod lashing to hold a chain.



A wooden pot hanger, held in place by a short section of wire hooked into the tripod lashing.

heat resistant cord or rope, leather, a wooden hook, even woodland climbing plant stems, or combinations of the above. Anything that can manage the weight and temperature will do. It is very simple for example, to cut an arm's length section of round wood, with a natural hook at one end to hang to hold the pot, cutting deep, slightly upwards sloping slots in the stem. These slots can be held either directly at the apex of the tripod by the lashing, or hung on a short piece of wire, as shown in the photo. With more than one slot, the wooden hook can also be hung at different heights above the flame.

Stout poles, if backed up by suitably robust hooks and chains, can support surprisingly heavy cooking vessels, even Dutch ovens. Steel rods can also be employed in these instances, but take the system beyond the remit of most human-powered travel methods.

*Advantages:* Simple. Depending on the supports, can carry heavy pots. Can often be created from materials found on site, and therefore suitable for the backpacker.

*Disadvantages:* Can only hold a single pot or pan. Only really suitable for boiling and general heating.

#### Cantilever, or camp crane

The cantilever system, or camp crane, is just as good for the backpacker, allows fine-tuning of the pot's position in both the vertical and horizontal plane, but is perhaps a little trickier to set up. Mind you, if built well it is very simple and convenient to use.

Start by driving a bare unworked length of straight wood (again, hazel excels here) about 120cm (4 foot) long and about 5cm (2 inches) in diameter into the ground about 105cm (3½ feet) from your fire. If you sharpen one end crudely, this will make things much easier. You can use a stone, a length of heavier log or the back (poll) of your axe to hit it in. Now for the slightly tricky bit.

There are different ways to produce the swinging crane section, and it can even be achieved with one length of wood, but most people select two, and this is the method I find easiest.

Find two more lengths of hazel, or similar, 2.5cm (1 inch) or so in diameter, each with a fork producing two branches. Cut one 75cm (2½ foot) length so that the fork sits at one end of a length, with each divided branch cut down to about 10cm (4 inches). The other is cut, just below the fork, to about 120cm (4 feet) in length, with only one side limb shortened to 10cm (4 inches). These two pieces are then lashed together, and the accompanying photo is probably going to be more informative than any description. A simple notch, cut at the end of the horizontal arm, will help keep any pot chain or wire in place. The photo to the right is best left to speak for itself, and it can be seen that the arm's own weight, along with the weight of the pot, is all that's needed to hold everything in place. Both pot height and lateral position over the fire can now be adjusted with ease.

Of course there is a drawback to any tripod or cantilever system While both setups are great for boiling and simple heating, there is no easy way to fry or grill without specialist hanging equipment. You can devise a system that hangs these grills or wide pans from a single line (or chain) of course, but it all gets a bit cumbersome, and isn't really what a backpacker would choose to carry anyway.

It is here, for the backpacking cook, that I will once again advocate the combined use of a lightweight folding trivet and pole support if you really do want to fry and grill. In fact, teamed up with a tripod or camp crane, the backpacker with a trivet in their rucksack can cook almost anything over a fire.

Advantages: Simple. Depending on materials, can carry fairly heavy pots. Easy to use. Can often be created from materials found on site, and therefore suitable for the backpacker.

Disadvantages: Can only hold a single pot or pan easily. Only really suitable for boiling and general heating.



The cantilever or camp crane.



The horizontal pole system.

#### **Horizontal pole**

This simple and elegant hanging system has the advantage of being able to carry more than one pot, although you obviously need to ensure the various elements are strong enough. One drawback, and a potential problem not often acknowledged in construction descriptions, is the difficulty that can be experienced in setting up the two ever so important Y-shaped uprights. If the traditional shape shown in most guidebooks is employed, the supports are frequently all but impossible to drive into the ground without damage. Burial of the bottom end is therefore required to ensure they remain stable and upright, and this is often a lot easier said than done. The key to easy horizontal pole setups is to choose the right shaped pieces of wood for these two supports.

As it's the perfect place to start, let's imagine we are in a hazel coppice. Rather than choosing the usual Y-shaped pole, depicted in so many drawings and photographs, search instead for a pole where a stout side-shoot has developed, leaving the main pole to continue upwards without any deviation. Once trimmed to shape, with a point at the base, these can be driven into the ground as easily as any standard stake.

If built properly, the horizontal pole makes a very versatile system, with few other pole-constructed supports able to carry more than one pot with such ease. Just ensure that the horizontal pole is high enough to avoid unwanted combustion. As with other systems, I prefer to use wire or chains and hooks to hold the cooking vessel in place, not least because they can be altered so easily to adjust pot height. If you don't have the required metal hanging bits and pieces, some form of wooden hooks can be rustled easily enough using local materials. I'll take a look at these after considering the single-pole crane, where they can be equally useful.

One key advantage, like the fire irons, is that heat in a pot can be reduced while cooking, simply by sliding it to one side.

Advantages: Simple. Robust. Suited to the backpacker as materials are often available in the wild. Can carry more than one pot. Easy to adjust cooking heat.

Disadvantages: Can be a little tricky to set up reliably if the right pair of uprights can't be found.

#### Single pole crane

I must admit I'm only including this system rather reluctantly. Despite its apparent simplicity, this is a pot support arrangement that needs to be constructed very carefully if failure isn't to be your camping companion. Then again, with only one pole needed, it is a very useful method for the backpacker, or anyone else wishing to travel light for that matter.

The emphasis when using a single pole crane, and not much of a surprise I suspect, is to ensure stability at the fixed end. Some people just use two stones, one to hold the bottom end, the other as a fulcrum. I suspect logs are often better, usually being less slippery, especially if a slot is cut in the fulcrum to avoid unwanted sideways movement. Ideally, the base is buried, ensuring it cannot move. The fulcrum stone or log should then be chosen with care to ensure it has a deep saddle or V, once again to hold the pole steady. It should go without saying that this fulcrum needs to sit in place securely too. You could use a short Y-shaped pole as a fulcrum of course, but then, I suppose, the arrangement wouldn't technically be a single pole crane anymore.

A notch cut in the top end of the stave will help keep the pot in place. You could of course hang your pot using a light hook and chain, as you would for some of the systems mentioned already. Alternatively, a beak-nosed wooden hanger can be used successfully, and more on that soon.

If the pot proves to be a little too heavy for the pole, a short stave, pointed at one end, with a natural Y shape at the other can be pushed or knocked into the ground to support the far end.

Advantages: Simple. Materials can usually be found on site, and therefore useful for the backpacker.

*Disadvantages:* Can be very unstable if not constructed with care.



The single pole crane, resting on a sturdy stone (with a good notch).



A short Y-shaped pole to add a little support.



The beak-nosed hanger in use, on the medium setting.

#### A beak-nosed hanger

While I find it easy and convenient to carry a length of galvanised wire from which to hang my pot, or a light chain and a couple of wire hooks, there may come a time when you just can't put a hand on a convenient piece when needed. Alternatively, and quite reasonably, you may feel that you'd prefer to stick to natural materials, found at each campsite, or wish to cut every gram or ounce from your loaded pack weight. This is where some form of wooden pot hanger comes to the fore.

These can also be very useful when hanging a pot at the end of a single pole crane, when you normally have no real control over its height, and therefore the heat. A wooden hanger works well with cantilever system too. In both cases though, care obviously needs to be taken to ensure they are fixed securely in place. The version I constructed should sort any stability problems out, and is often known as a beaknosed hanger. The reason for the name should become clear.

To make one of these useful bits of kit, you'll need no more than a good sharp knife and a coppice or hedgerow. The ideal starting point is a hazel rod, about thumb thick, or a little thicker, that has split to grow a side shoot. Cut this away just below the divide. Now cut the thinner side shoot down to about thumb length. The main shoot can be cut to about as long as your arm. It should be obvious where the pot handle will sit.

The next bit is a little trickier, but shouldn't prove too difficult to master. The aim is to produce three or four notches along the longer length. Cut at points about an outstretched hand's breadth apart; these can be used to hang the hook at different heights over your fire.

To produce each notch, it is often easiest to start by cutting a cross at the desired point. Crucially, you need to make sure these are on the same side of the long stem as the side shoot. With the beaks cut here, any hanging arrangement will be much more stable than a setup that places them on the opposite side.

Cutting away wood on the hook side of the cross, a little beak can be produced. If this is undercut, as shown in the accompanying photo, it will stay in place much better. The photo also shows how the end of the single pole can be trimmed to produce a slight raised lip, increasing security further. The same system can be utilised with the camp crane. In either case, to adjust the heat in your pot, simply select a different beak.

This type of hanger can also be used with a horizontal pole, where a little trough, cut on the upper side of the supporting rod, will accommodate the beak safely. Alternatively, you could use a short section of wire as shown in the photo of the tripod/wooden hanger photo, simply hooked over the horizontal pole.







Right: your beak should end up looking something like this.





Left: the hanger in place on the end of a single pole.

Right: the beak sat in a cut trough on a horizontal pole.



The stick, in use.

#### The stick

A simple stick can be surprisingly useful, and is the ideal system for the backpacking campfire cook looking for the lightest option. To picture the stick in use, I need only mention that old campfire cliché, the toasted marshmallow. For those not particularly taken by these gooey and very sweet balls, something rather more sustaining, such as humble toast, more ambitious bread, a fish, or in fact just about anything you can spear securely, can be cooked successfully at a sharpened end. One very distinct advantage of this hand-held system is that heat and resultant cooking rates can be adjusted simply and almost instantly. The trick is to keep any one side of your offering from lingering too close or for too long.

As with the single pole crane, a Y-shaped support can be pushed into the ground on the far side of the fire, easing whatever burden may be experienced.

Should the stick prove too tiresome to hold, or you could just do with your hands free, it can be stuck in the ground. In most instances the stick will be set at an angle to hold the offering to be cooked out over the fire, but it can also be set vertically to one side.

Positioned carefully, and with a watchful eye kept on developments, a surprising variety of foods can be cooked successfully like this, even whole salmon fillets or thin cuts, almost sheets, of meat. In these cases though, a slight elaboration, achieved by simply splitting the stick and clamping the fishy or meaty slice between the two halves, will probably make the whole attempt even more successful. You could even add thin horizontal stick struts to help hold things in place, but this is straying guite a way from the humble stick starting point.

**Advantages:** As simple as it could be. Materials can usually be found on site, and therefore ideal for the weight-conscious backpacker.

*Disadvantages:* Rather limited use (unless elaborated upon that is).

#### **Green log supports**

Partly because it means cutting green wood, I tend to see this method of pot support as something of a backup system, used where materials for other techniques are simply not available. The other reason I relegate it to a reserve or emergency role, and have left its inclusion till this late in the list, is that I've never been much impressed by the results. On the other hand, all that's required are a pair of logs, about two to 60–90cm (2–3 feet) long, and about 15cm (6 inches) wide. These can then be placed parallel with each other, one to either side of the fire, the pots rested between them, much as you would with fire irons. If you can find them, two lengths of waterlogged dead stuff will do perfectly well too.

The advantage with this system is that nothing need be carried from site to site when travelling. The disadvantages, as I see it, other than the potential need to cut living wood, is that it can be hard to get at your fire, trapped as it is between the two flanking logs. This makes it tricky to add fuel and otherwise tend to your heat source. The two logs also cut down the opportunity for air to reach your fire, unless you prop the ends. Finally, because of the gap needed to provide room for a workable fire, and the curve of the logs, it is usually only possible to prop large-based vessels such as frying pans and large saucepans. Kettles, unless particularly big, will simply fall between the breach.

Advantages: Simple. Robust. Can carry heavy pots. Can support more than one vessel. Can often be created from materials found on site, and therefore suitable for the backpacker.

Disadvantages: Usually requires the cutting of green wood. Can only hold pans with a wide base. Hard to maintain and fuel the fire (which often doesn't burn too well due to restricted airflow).



A pair of green logs, used to support a large kettle. These are willow, so will hold out for guite a while.

### Cooking

With the problem of how to support your pot over the fire solved, I hope, it's now a matter of how to produce a meal in them. It must be pretty obvious by now that Susannah and I have a preference for cooking over fire irons, so I'll start a discussion from this position. Many of the following comments will be just as relevant to cooking while employing other supports systems, but I'll try to ensure that any differences are made clear.

#### **Cooking over fire irons**

Before your pot arrives, check that the irons are level, and about 5cm (2 inches) or so, maybe a little more, above the embers. At this height the bottom of the pan sits close enough to be heated easily, while still leaving room between the hot coals and the underside of the fire irons to add additional slim or thin-cut fuel.

The ember bed never needs to be much broader than the base of your cooking vessel.



One mistake that's often made, and not just when cooking with fire irons, is allowing a cooking fire to grow too big. If you think about it, the aim of the whole cooking process is to heat a pot or pan, so the bed of embers never needs to be more than a touch broader than the base of your cooking vessel. Any wider, and you not only waste fuel, but you end up cooking yourself too. As few pots have a bottom with a diameter more than 20-25cm (8-10 inches) that should be the limit of your fire's width.

It should extend a little along the line of the fire irons though – resulting in a sort of 'embery' lozenge about 30cm (12 inches) to 45cm (18 inches) in length. This not only means that you can add a second pan if needed, but this long bed also ensures that all-important control of the heat.

With a single pan or pot, one end of the elongated ember bed can be allowed to die back a bit (by stoking less frequently), while the other end is kept lively by stoking more often. The pan can then be slid to the lively end when more heat is needed, or to the quieter end to slow things down. It really is that simple. If things at the cooler end are still too warm, simply do as you would at home, and lift the pan away from the heat completely. Now, if one person concentrates on fire management, maintaining those embers, the other can just cook.

For quick frying and to bring water to the boil rapidly, just add more fuel and keep a lively flame going. You'll soon find you can heat things much faster like this than you ever could over any gas fire.

A slight cautionary note here. Don't get too carried away with that fuel. Add too much, especially if it arrives in large chunks, and you may well swamp things. You'll soon gain a feel for this, but a fire needs air and room for the flames to move as much as fuel, so a balance needs to be maintained to keep those hot coals going. If you do over-stoke a little, either lift some of the unlit fuel away, or just wait a while. Unless you've really smothered those embers, or the fire is still very young, everything will eventually wriggle back to life again.



An elongated ember bed allows control over heat.

The other thing to consider, and it might seem slightly counterintuitive, is that small thin stuff, if stoked frequently, will produce much more heat than larger pieces of wood, at least in the short term. In fact, one way to slow things down for a while can be to add one or two heftier logs. Until they've caught fire themselves, they are really only barriers between pot and ember after all.

You'll also find that some fuel just burns better than others. With experience you may well know this before adding a twig from a particular tree to the fire, but surprises happen. In the end, experimentation on the day will soon tell you which wood is going to flare up and burn the moment it touches those embers, and which is going to sit there sullenly for the next five minutes before starting to burn. Each will have its use.

#### Under a tripod, crane or pole

Many of the comments made already about fire management and control under fire irons are just as valid if your pot is hung over it from a tripod, crane or horizontal pole. The fire only ever needs to be a little larger than the vessel itself, with perhaps an elongated shape developed to provide a hotter and cooler end. When using the crane or horizontal pole, the pot can be slid over or away from the heat as needed. Alternatively the height can be adjusted. Remember that even with a tripod, assuming it's not too hefty, the whole thing can be shifted carefully to one side to take a pot away from the heat.

One particular caution applies to the camp crane, and that concerns the structural integrity of the setup when the pot is lifted off its hook or chain. Much of the rigidity of the system relies on the weight provided by the pot at the end of the arm, quite simply forcing the hooked ends of the two outriggers tight against the upright support. Once that weight is removed, and the all-important friction reduced, there is a danger the whole thing will collapse. It doesn't always happen, but the possibility is worth bearing in mind.

#### **Grilling**

Grilling over a wood fire is simplicity itself, and this is where the old wire oven shelf comes into its own. These can be propped on a few stones, but they're much more efficient if dropped onto those fire irons. You might push them apart a little first to provide a more stable base.

The most important thing for effective and controlled grilling is that good deep bed of embers. Only in very rare cases, and I'm thinking here of grilling perch for example (see chapter: What to Cook), will flame be a good idea. In brief, flames burn bare food, while embers cook it.

As for temperature control, the principle is just the same as described before. Assuming your ember bed is good and mature, it should be easy to ensure that one end is hotter than the other. To control the rate of your grilling, just move the food about.

Should everything die down to the point where the embers are not really doing the job anymore, just shuffle your food to one side, stoke over the embers at the other end, and wait until the resultant new outbreak of flame has burnt down again. This will now be your new hot end.

#### Reflector oven

The proof, as they say, quite literally for a change, is in the pudding... and the puddings from a good reflector oven come out pretty darn well. As do baked mushrooms, loaves of bread, roasted potatoes, sausages or roasted vegetables. We've cooked dozens of different dishes, ranging from hot sticky cakes to roast beetroot and baked fish. It's all pretty simple, especially on the oven side of the equation. With heat arriving from all angles any tray or pan need only be turned occasionally to provide some impressively even results.



Using an old wire oven shelf to grill, in this case propped over fire irons. Note that the fire has been raised off the underlying damp ground using stone slabs.



Using our Svante Fredén reflector oven in an appropriate setting.



You can see the all important angled sides reflecting the heat on this purpose built Svante Fredén oven.



The fire doesn't need to be big; it just needs a few flames. This fire is divided to boil water while baking. Note the fire bowl in the background.

To obtain the best outcomes when in use, the oven needs to be pretty much on the same level as the fire, close, but not so near that the base becomes overlain with embers (when I understand there's a chance it can deform or even melt when trying to obtain high temperatures).

To my eye, this really shouldn't happen. From our experience, the fire doesn't need to be either large or unwieldy to produce some perfectly usable cooking temperatures in the oven, and quickly too. Even with a fire not much bigger than a dinner plate, and not lit for more than ten minutes or so, we've had cooking oil bubbling merrily around potatoes almost as soon as the roasting dish was placed on its wire seat.

Unlike traditional wood-fire cooking, when best results are obtained after developing a good deep bed of glowing embers, the heat captured by the reflector oven is from the flames. Using good dry twigs and thinly spit logs, those flames can be at work immediately. If less heat is needed, you slow the rate of stoke. When more is required, you simply feed them into the burning pile a little quicker.

While it is undoubtedly easier to cook using a fire to heat the oven on its own, we've frequently managed to combine reflector oven management with a pot or grill shelf propped on our fire irons. It isn't particularly tricky to manipulate a fire to display a duel personality; an ember rich patch lying under the pot, pan or grilling area, while a patch of flame dances merrily off to the side facing the open oven. Cod and roast potatoes, cooked at the same time on the northern Norwegian coast, stands out as a particularly enjoyable meal from a dual use campfire.

One small matter to consider; make sure the inside of your oven is kept clean. Sitting close to the fire, with smoke often swirling inside, the reflective inner surfaces can slowly become quite sooty, significantly reducing the efficiency of the oven. Gentle cleaning, that avoids scratching the fairly soft aluminium sides, will make a pretty dramatic difference to cooking times. I haven't yet gone as far as polishing the inside of my oven, but suspect a bit of a shine would make quite a difference too.

#### **Dutch** ovens

These admittedly rather heavy items of kit offer the distinct benefit of versatility. Used as a large saucepan, you can simmer and boil as usual, but food can also be placed inside that solid cast iron lump to roast and bake.

When cooking casseroles or stews, the Dutch oven is really no different to any pan. Just hang or prop it (using a sturdy support system) over your fire. A major difference is that you can sit your oven straight onto the embers if you wish. Most pots or pans don't care too much for this, but a Dutch oven will be fine – usually. I would advise though, if the weather is particularly chilly, not to swing your oven off the cold ground, and certainly not off the snow, and straight onto a hot fire. The cast iron just might not be able to take that rapid and extreme change in temperature.

The main departure from normal pot use is that you can bury your Dutch oven in the embers of your fire, even heaping them over the lid. The better Dutch ovens have a high lip around the edge of the lid just to hold these embers in place. With the heat from these burning coals coming at the food inside from all angles, a very even cooking environment can be produced, perfect for roasting and baking. However, the whole process does need a little thought and care.

I began this chapter by stressing the importance of temperature control in woodfired cooking, and this is just as important here, only a little trickier to judge. With the food sealed within your oven, it isn't immediately visible. As a result the most common problem experienced by people experimenting with Dutch oven cooking is burning the contents. The key to avoiding this is to always err on the side of having everything a little too cool than a little too hot. After all, there's almost always a fairly simple response to an undercooked dish, but rarely anything that can be done with burnt food other than cutting away the most charred and inedible bits.

Setting out to roast or bake results in the only occasion when I'll build a fairly big fire, dropping some pretty hefty logs, maybe three to 8-10cm (4 inches) wide, onto the fire. I'll then let these burn through almost completely to produce a good



You can hang or prop a Dutch oven (using a sturdy support system) over your fire.



Look closely, and you can see a pair of six-inch nails, used to lift the loaf tin off the base of the oven.

deep bed of glowing ember lumps. Softwoods such as pine or spruce tend to burn through too quickly, and the best embers will definitely develop with a hardwood fuel. While all this is happening, I also place the oven on the fire for a short while, just to warm it all through. Try not to leave it there too long though, as it can be very easy to carbonise any natural protective coating that has developed over the inner surface through use.

Once the flames have all died down, and the embers are just sitting there, glowing a little more brightly every time a breeze wafts through, I use a stick to clear a space at the centre of this bed, leaving only a thin layer of crushed embers over an area a few inches wider than the base of the pot. This is where you'll sit your oven.

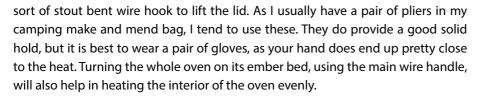
It's still very hard to judge the temperature, but if I can hold an open palm about 20cm (8 inches) above this area for three seconds or more, it's probably not too hot. It should go almost without saying that this test has to be approached with care.

When baking, it's perfectly possible to place your cake or loaf directly on the base of the oven, but I prefer to use some form of tin or other container that will help keep the food from touching the hot inside edges. If you take care not to leave too deep a bed of embers beneath your oven, the base rarely grows hot enough to burn food easily, often cooking the base of a pie or loaf perfectly, for example. One trick to avoid this possibility, until you have a good feel for the whole process, is to place your baking tin on something to raise it up a little. I carry a pair of six-inch nails, but you could use anything that will take the heat and not taint the food.

Many people also grow a little too enthusiastic about the number of embers placed on the lid, with inevitable results. Again, any advice about the right amount is hard to quantify, but keep in mind that it will always be better to have too few lumps of glowing charcoal up top than too many.

When cooking with embers on the lid, the heat produced within the pot can be slightly uneven. To counteract this, you can either move the embers about a little, or more easily, just rotate the lid a little every few minutes. Many people carry some







Left: using a pair of pliers, and a leather glove, to rotate the lid on a Dutch oven.

Right: the lid of a Dutch oven, covered in gently glowing embers.

### Muurikka and fire bowls

As they share many features, we can take a look at cooking with Muurikka and fire bowls together.

In many ways the fire bowl, or a large Muurikka used as a fire bowl, is really no different from a cooking fire in a shallow scoop on a beach or in the woods. Once lit, and then allowed to mature, you can use them to cook in just the same way, supporting your pots and pans over the top with fire irons, a tripod, camp crane,



A Muurikka in use over a large fire bowl.

or whatever other method you choose. A Dutch oven will sit inside perfectly happily, or can be suspended overhead by something robust. Perhaps only the reflector oven would present a few challenges, but even these could almost certainly be overcome with a little ingenuity.

Of course the Muurikka (or griddle pan) can also be used directly over the fire as a cooking vessel in its own right. And a fine one it is too, allowing frying, dry-roasting, simmering and boiling within its shallow open bowl. Through basic manipulation of the underlying fire, warmer and cooler spots can be created within the bowl, or the fire can simply be kept small, which is my preference, when a cooler periphery surrounds a hot centre. Not only can this edge be perfect when high cooking temperatures would spoil food, but is perfect for keeping cooked food warm until everything is ready to serve. For all these reasons, one of the larger Muurikkas is often worth the extra weight and resultant difficulty in transport.

What's more, the Muurikka you're cooking in can be propped for use in either a fire bowl, or just another Muurikka, usually a larger one. In Finland, where campfires often need to be kept off the ground, this double-Muurikka system is very popular, with many Finns able to conjure up some wonderfully varied dishes using this simple system.

#### After the meal

#### Washing up

If there is any food left on plates or in bowls, and this is almost unknown in the Gent camp, the remains can usually be burnt on the fire. Before we set forth to clean them further, we usually use paper kitchen roll, or leaves, to wipe away just about anything left, with the dirty results going on the fire too. All this means that when it comes to actually washing things, little soap or water is needed.

Some form of detergent is usually required though, and we use biodegradable versions in as small amounts as possible. Water might be collected from a stream, lake

or the sea, but any dirty or soapy results are discarded at a reasonable distance to reduce the chance of contamination. Only when the plates, bowls or pans are clean, might they be rinsed off.

If you run out of soap, or are really keen to keep pack weights down, a little of the grey fluffy wood ash, mixed with water, makes a powerful detergent. Be very careful though, the resultant mush is also extremely alkaline, and could cause serious damage to your skin if left in contact for long. Above all, do everything you can to keep it away from your eyes.



Cleaning the soot off a pan with wet sand.

### Cleaning your pots and pans

Cleaning pots and pans is no different to sprucing up the plates, mugs and bowls, just a dirtier job that usually takes quite a bit longer. Once again, but with all the warnings just given, if your cooking vessels are really greasy, or coated with bakedon food, that wet wood ash will usually shift it, although you might need to leave it sitting there for a little while to do its magic.

One trick we have developed, or rather Susannah has developed, deals with the baked-on fire residue on the outside of pans. Now I have to admit, that left to my own devices, I'd probably leave it there, but this sooty black and slightly greasy layer does tend to migrate. What were once pristine trousers or sleeping bags can soon look pretty grubby after only fleeting contact with a well-used pan.

Using just the water and sand often found somewhere along a beach, lake edge or river bank, Susannah sits and rocks the pot exterior back and forth in this abrasive mix. Ideally this is done right at the water's edge, where the effect is most apparent. No detergent is used, so nothing other than carbon should be entering the water, and in these amounts we believe that no harm is done. We certainly have some very clean pots and pans, and we've even been accused of using only brand new kit before now. One observer, seeing our sparkly stainless MSR pot collection, and looking really guite pleased with his exposé, suggested that we obviously didn't cook over a fire as often as we claimed.

# CAMPFIRE COOKING **TIM GENT** Tim Gent shares his passion for cooking over an open fire. Gathering and preparing the fuel, lighting and tending the fire, cooking techniques and favourite recipes are all covered. Backpackers need to travel light whereas others can afford to take along more equipment in their vehicle or canoe. Tim caters for this and suggests different equipment lists and cooking techniques to cover the different approaches. Whether you are planning extended backwoods trips or simply an adventure with your children in the back garden this book will be an invaluable companion. www.pesdapress.com