

TRIPODS & SUPPORTS

They do more than just hold your camera steady

by Jack and Sue Drafaht



Besides holding your camera steady to prevent image blur due to camera movement, a tripod will lock-in your composition while you wait for just the right moment to shoot.

The word tripod literally means "three footed." We bet that who ever came up with the term never dreamed it would have extending legs, pan and tilt heads, side arms, bubble levels, center weights and cable releases. The good news is that tripods come in every shape and size, to fit most every price range. The bad news is you can't buy them all. You will have to make your buying decision based on ads, articles, sales people, and what other photographers recommend. Hopefully that's why you are reading this article. In the next few paragraphs we will introduce you to all the types of camera supports and their applications to help you make your selection.

Tripods are thought of mainly as camera stabilizers, to keep camera movement from causing blurred images when shooting at slow shutter speeds or at high magnification. But tripods also lock-in your composition so you can study it and wait for that perfect moment to shoot. Tripods are good friends.

TRIPODS

The main thing to keep in mind is that you need to be able to keep the camera

from moving in order to achieve maximum sharpness in your images. If you use a tripod or some type of camera support, you will get better pictures. It is a law of physics that things at rest, stay there. So now that we have established that you need a tripod, just which one should you buy?

There are several things to consider when purchasing a new tripod.

You must first decide which camera format you will be using. The larger the format, the larger the tripod you will need

ble, but also offer less flexibility. The key is a compromise. Select a tripod that extends to the full height that you require. The legs should be strong enough to support your camera when extended to full height.

Don't try to get one tripod to fit every shooting situation you will encounter. If you are a serious photographer, you will find yourself with two or three tripods. As photojournalists, we have at least a half-dozen different-sized tripods. We have two for studio work, one for shooting at the beach, one that works well in rivers, one for backpacking, and one that can be configured to fit in tight quarters. When we fly on location for articles, we even have a special lightweight tripod that helps meet weight restrictions.

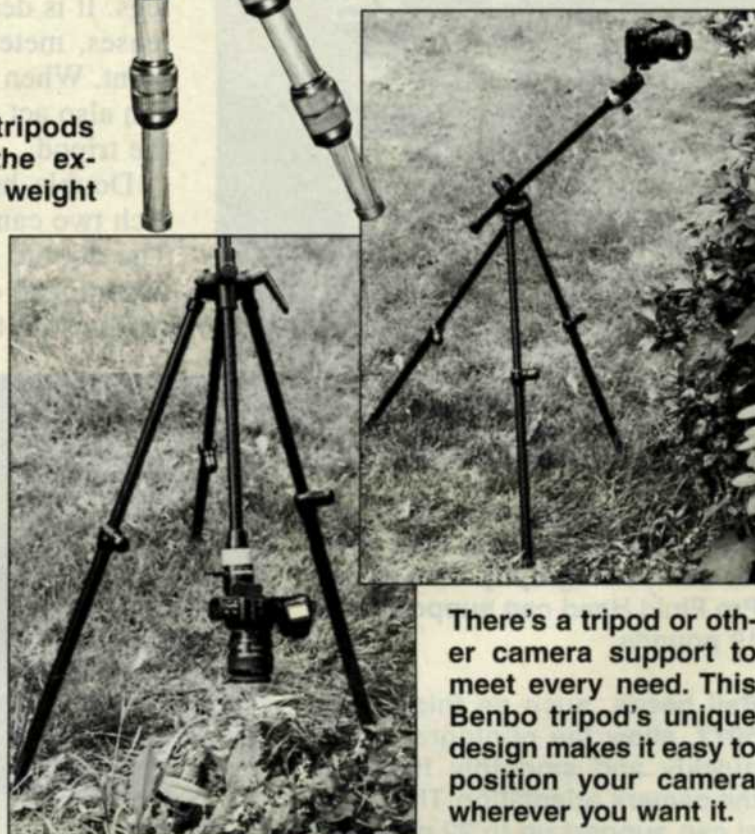
Let's take a look at the tripod legs, especially the locking mechanisms. You need a system that sets up easily so you don't miss that great shot, stumbling with your tripod. If you plan on shooting outdoors, make sure that the locks are going to work easily in wet or cold weather. The flip lock device is fast and positive, but it can accidentally be released if bumped. The twist lock is very efficient, but it takes a little longer to lock in place and you have to be careful not to get grit or sand in its threads.



Gitzo's Mountaineer tripods and monopods offer the extreme strength and light weight of new carbon-fiber technology—30% lighter than aluminum.

to steady the camera. This is also true if you use long telephoto lenses. If you shoot with 300mm or longer lenses on your 35mm, you will probably need a tripod intended for 2/3 and 4x5 cameras.

The bigger the tripod, the more stable it is, but generally the less practical. Tripods with braces between the legs and the center shaft are more sta-



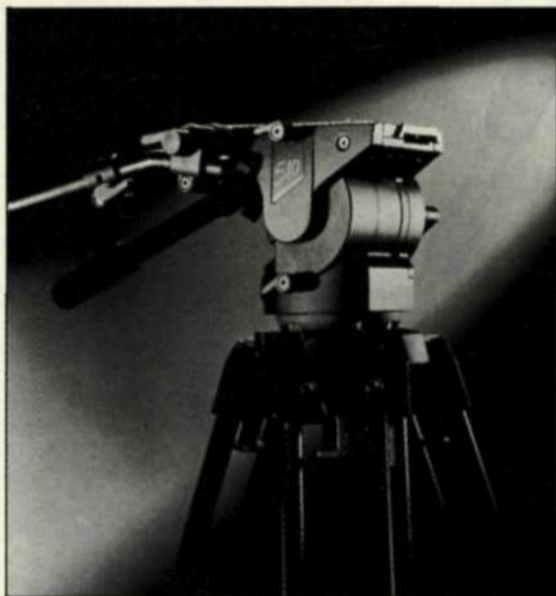
There's a tripod or other camera support to meet every need. This Benbo tripod's unique design makes it easy to position your camera wherever you want it.

Tripods with locking knobs work better in mud and sand but are not as compact, and you have to be careful not to over-tighten the knobs.

Tripods today are made of wood, plastic, steel, aluminum, graphite, and a few other exotic materials. Your primary shooting location will determine which material is best for you. If you are a backpacker, then aluminum or graphite would be the lightest. Wood works well in extreme cold because you can handle it without the cold transferring to your hands. Studio photography is best with heavy tripods, so steel or wood might be your best choice.

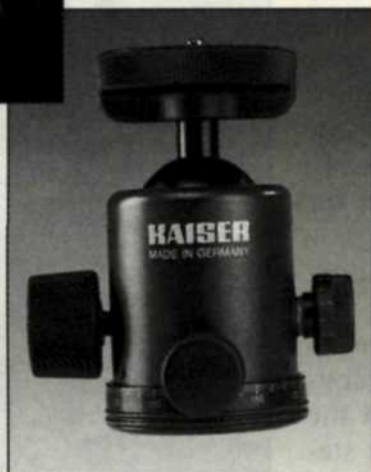
TRIPOD HEADS

Not all tripods come as complete units. Some don't have heads, just legs. There are as many variations in tripod heads as there are with the tripods themselves. Again the decision is dependent on your intended use of the tripod, and the price you are willing to pay. In some cases the head is as expensive as the legs. The tilt or pan function on some heads allows you to smoothly pan left to right or up and down. This function is especially useful for sports and wildlife photographers. The more sophisticated fluid head is mainly used by professional photographers, and gives a very smooth transition in almost any direction. If you like changing quickly from vertical to horizontal, some tripods have a 90° tilt function that makes shooting easy. The ball head is designed to give full movement in any direction, before it is locked in place. This



Although designed for film and video, fluid heads are also great for still photography. This Bogen Pro Fluid Head can support up to 19 pounds.

Ball heads, such as this Kaiser 6012, allow the photographer to quickly and smoothly fine-tune the camera orientation. This model can support up to 22 pounds.



type of head is especially useful when working on uneven ground. Instead of constantly adjusting the legs, you merely loosened the ball head, level the camera, and lock it in place.

TRIPOD ACCESSORIES

What photo product would be complete without accessories? The tripod is no exception. Starting at the top we have the quick-release plate. One piece fits on the camera, its mate fits on the tripod. The mechanism allows the camera to be detached from the tripod quickly with the click of a button. This comes in really handy when you need to pull the camera off the tripod quickly, make a change and return it expediently. Some of the larger tripods wear an apron that attaches to the inside of the three

“Not all tripods come as complete units. Some don't have heads, just legs”

legs. It is designed to hold film holders, lenses, meters and other camera equipment. When filled with heavy objects, it can also act as a center weight to steady the tripod.

Double head supports allow you attach two cameras or a camera and flash. The double head can fit directly on the tripod head or on the tripod legs. If you really want to start adding more parts to your tripod, you can add a center column for that extra height, or maybe a side arm to hold the camera in an unusual position. Studio photographers find the side arm handy to put the camera directly over a shooting table.

If you're con-



The very handy Cullmann Touring Set packs in one easy-to-carry case a lightweight, compact tripod with removable center column and ball head, a suction pad, a ground spike, an adjustable universal clamp and a wood screw.

cerned for the health of your tripod, then you may want to consider tripod leg protectors. These protectors wrap around the legs of a tripod and are fastened with Velcro. They protect both the tripod legs and also your shoulder when you have to carry the tripod from location to location. You can even get all-weather shoes for your tripod, so that snow, sleet and rain will not stop you from taking a picture. It's the first time we've ever seen a box of three shoes!

MINI TRIPODS

These compact and adaptive tripods are miniature versions of their big brothers. They work very well on location, when you don't have the room for a normal tripod. They can be placed on tree stumps, picnic tables, against walls, on top of your car or on the floor for low-angle shots. You get the idea. They usually fold up flat or compress into the tripod's center column, and fit in any camera bag. We always carry at least one baby tripod on all photo sessions, just in case we need it.

THE MONOPOD

Some situations make it difficult to use a tripod, so a monopod is a good alternative. The monopod is very much like the tripod, except it's missing two legs. The monopod uses your two legs to steady its one leg. Monopods are designed to reduce camera shake and mirror vibrations and allow you to use

Tamron's Action Monopod nicely complements the company's 200-400mm supertele zoom lens.





Clamp-pods let you safely attach the camera to bicycles and other vehicles for unusual shots.

a slower shutter speed than possible hand holding the camera. The monopod should not be used for long exposures. Hikers love the monopod because it can steady the camera, and also serve as a walking stick. Most monopods collapse down to a fairly small package that can attach to the side of your camera bag.

SHOULDER OR CHEST PODS

Another method for steadying the camera is with a shoulder or chest pod. Many of these units fit on a gunstock type device, which is held up against your chest or shoulder as you depress the shutter release. A cable release connects the camera shutter into a trigger so that it operates like a gun. Gently squeeze the trigger and you've got the shot.

CLAMP-PODS

Some of the strangest camera support devices come under the cover of clamp-pods. The top part of a clamp-pod is usually a very simple tripod ball head, but the base

This PGAS6 eight-inch travel tripod from Photographer's Warehouse can function as a chest pod, and comes with a handy mini-ball head.



has no similarity to a tripod. The window clamp-pod has a large two-part clamp that screws down against the thickness of a window. This is great for wildlife shots where getting out the car may get you into trouble. These same clamp-pods can attach to tables, tree limbs, hand railings, or even the side of a tripod.

If you like shooting at the edge, a table clamp-pod has a standard tripod head, an elevated center shaft and a large clamp that attaches to the edge of a table, ladder, or shelf. This unit is great if you have to climb a ladder and shoot down on a group of people.

FISH POLES

Fish poles look exactly as the name states. Each consists of a telescoping pole that accepts a camera or flash attachment at the end. The camera is operated with a

“Placing a camera on a tripod does not guarantee sharp images”

wire or wireless remote control device. This unit is great for getting that high-angle shot, or getting into places other devices cannot go. We found fish poles extending out to 150 inches that can support up to 5 pounds.

BEAN-BAGS

Most photo bean-bags are not loaded with beans. Most are empty until they are filled with sand, beans or a pliable material found at the location. The bean-bag support is a favorite of long-lens shooters. The camera and lens lie on top of the bag, creating a very solid shooting support. The drawback is that camera movement is somewhat restricted.

DIM LIGHT

Why would you use a tripod? The most obvious

BENBO

Benbo tripods feature a unique “bent bolt” swivel joint, which allows the legs to be independently adjusted to any angle. In one move, a quick-lock lever locks all three legs in place. A central column extends up, down and to the sides to change the camera position without otherwise moving the tripod.

BOGEN

The Bogen line is diverse, with choices in every category. The Workhorse 3036 is a pro model that towers to 80½ inches, but can be lowered to nearly ground level with its variable-angle leg settings. The new 401 compact geared head offers precise movement in 3 directions.

CAMBRON

Cambron tripods and monopods are available in several sizes. Close-up photographers will appreciate the Duo-Micro-Just twin-rail focusing device, which mounts on the top of a tripod. Critical composition and focus can be achieved in precise, measured movements.

CULLMANN

The Cullmann line offers lightweight through heavy-duty tripods and monopods, as well as the unique Multipod—a monopod with two struts to steady the it against a vertical surface, such as a wall or your chest. The CU3430 tripod features a clever center column that is actually a removable monopod.

DAVIS & SANFORD

Davis & Sanford has a line of camera supports that includes lightweight and compact travel tripods, heavy-duty tripods for medium- or large-format cameras, camera stands for studio work and monopods. They also offer a variety of heads.

FOBA

Foba tripods and heads are primarily designed for larger, heavier cameras, such as a pro SLR or medium- and large-format cameras. Foba also produces large, extremely sturdy studio stands.

GITZO

Gitzo tripods and monopods are famed for their sturdiness, and over 40 tripod choices and 13 monopods, as well as heads, lateral arms and quick-releases. The carbon-fiber Mountaineer units are 30% lighter while still maintaining 100% of their strength and stability.

KALIMAR

Kalimar's tripods range from the Pocket Pod for compact cameras to heavy-duty tripods with fluid pan heads for video or still photography. Some feature a built-in spirit-level.

KB SYSTEMS

If you like the aesthetic and structural aspects of wood tripods, you'll like KB tripods, with legs of ash, black walnut, teak, mahogany or other handsome woods. Heads and fittings are cast aluminum.

LINHOF

Linhof offers tripods for general use, as well as some to perform specialized tasks. If you need height, the Pro Giant model soars to 72 inches, while an extra thread low on one leg permits low-to-the-ground work. Their 2 Universal and 3 Profi ball heads offer 9 variations.

MAJESTIC

Majestic tripods are specialized units designed for heavy-duty cameras or film and video equipment. Many are mountable on accessory dollies to facilitate movement in the studio. To give you an idea of their capacity, the smaller Majestic tripods can support up to 40 pounds of equipment. They also make pan heads, gearheads and sidearms.

MOHAWK

Coast Manufacturing produces the Mohawk line of tripods. Their Fold-Away model is designed to be tucked in a camera bag or luggage, because it folds down to a flat 5x14-inch rectangle. The unique design allows it to be used as a 62-inch monopod or 56-inch tripod when fully extended.



In dim lighting, a tripod lets you shoot with slow, fine-grain (and rich-color) films without image blur due to camera shake.

application for a tripod is when the light level drops, shutter speeds get longer, and you just can't get a sharp picture. The rule of thumb is that if the shutter speed drops below the focal length of your lens, you need camera support. For example, you can handhold a 125mm lens as long as the shutter speed is 1/25 or higher. If it falls below that, you need camera support.

Placing a camera on a tripod does not guarantee sharp images. If the shutter speed is faster than 2-3 seconds the movement of the camera mirror will blur the image on most tripods. When using long shutter speeds, you can add weight to the base of the tripod, or gently push down on the top of the camera as the exposure is made. A cable release can help with long exposures. If one is not available, you can place a black card in front of the camera, lift the black card when the camera shake settles, time the exposure, replace the card and then close the shutter.

HIGH MAGNIFICATION

Macro and long telephoto lenses magnify the subject, but they also magnify the effects of camera shake. So it's a very good idea to use a tripod when doing macro work and shooting with long lenses. The tripod can hold the camera steadier than you can, even if you shoot at a high shutter speed. At really high magnifications, or in windy weather, it's a good idea to further stabilize your camera by hanging a weight from the center of the tripod, or placing a weighted bean-bag over the camera.

PANORAMAS

Panoramas are easy to achieve but care must be taken to level the tripod first. Once you're sure the camera is level, make a practice turn across the horizon to see if it is also level. Check to see if the top or bottom of the photo is cut off by any part of the panorama. Some tripods have bubble levels and degree markers on the base of the head to make life easy.

HIGH-SPEED ACTION

High-speed action can (and if you're using a really long lens, should) be shot with a tripod if the tripod has a smooth operating pan head. Release the pan-head lock and start the pan just as the subject passes by. This works great if you need to repeat the sequence over and over, as in a car race. Be sure to lock the head down if you want to photograph still subjects. The chest/shoulder pod or even the monopod would give you more flexibility



Celestron's Car Window Mount turns your car window into a camera support.

but it is not nearly as stable. Chest pods and monopods find a lot of use among action photographers where tripods are not permitted, as on the sidelines at some sporting events. A quick-release plate for your camera will allow you to quickly remove your camera from the tripod or monopod for hand-held shooting when desired—as is sometimes the case when photographing wildlife subjects such as birds. (Chest pods are great for photographing birds in flight.)

LIGHTING CONTROL

Studio photographers consider the tripod an important photographic tool. It

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allows a single photographer to change lights, arrange the subject, and actually take the picture while watching the subject from the side of the camera. Once the tripod is set up, the camera angle can hold for hours until the product shots are processed and approved.

A tripod is mandatory for the technique of painting with light. The tripod keeps the camera (with its shutter locked open using the B or T setting) locked into position as the photographer walks around the subject painting it with either tungsten or strobe light. Remote controls allow the photographer to operate the camera from a distance as the scene is being illuminated, should the B or T setting not suffice.

Portrait photographers need to spend most of their time posing the subject and adjusting the lighting. The tripod allows the camera to remain locked in one position for uniformity when several portraits are being made (and so that camera movement doesn’t cause unsharp results with long tungsten-lighting exposures).

MAKING THE IMPOSSIBLE POSSIBLE

Tripods and other camera supports are among the most essential accessories for serious photography. Think of tripods and camera supports as an extension of your photographic expertise. Learn how to use them and make them work for you—with a bit of practice, that will become second nature, and then you’ll be even more likely to use them. Impossible angles become possible. Long-exposure images remain sharp and you can even have better lighting control. You can do things you could never do before. Best of all, tripods give you the added support to help you get the shot. □



In high-magnification work—whether with a macro lens (right) or a super-telephoto (above)—a tripod is essential if you want sharp photographs, because it will prevent camera movement, the effects of which are magnified along with the image in macro and tele work.



PHOENIX

Phoenix tripods feature black anodized finishes. The Wildcat tripod is ultracompact, for point-and-shoot cameras and small SLRs. Like the other tripods in the line, it features a geared center column, leg braces and a fluid pan head with quick-release fitting.

SLIK

Slik makes a varied line of supports. The 3-AF Sport tripod has a unique head, featuring a ball head with a trigger-action pistol grip to quickly position your camera at any angle—great for action photography. The 300DX is a compact pro-level unit that can hold up to 11 pounds.

TUNDRA TARGA

Tundra Targa offers various tripods for use with compact cameras to 35mm SLRs with telephoto lenses. The products are designated 1–6 with 6 being the most heavy-duty version.

VELBON

Velbon tripods range from low-cost basic tripods to high-end heavy-duty professional models. The Carmagne-series tripod and monopod have carbon fiber legs for strength and light weight.

VIVITAR

Vivitar’s line of economical photo and video tripods features geared center columns, removable quick-release platforms, non-marring rubber feet and aluminum-alloy construction. The smallest fold to 13 inches and weigh less than 2 pounds, including pan head. The largest extends to 67 inches.

ZONE VI

Zone VI makes beautiful wood tripods from clear mountain ash. They are big and solid, designed to handle everything from large 35mm SLR cameras to 4x5 and 8x10 large-format view cameras. They feature oversized knobs, spiked feet and legs that can be spread out flat to place the camera as low as ground level.