

species. The palm is extremely resistant to drought and even grows in rocky crevices of granite massifs. During the dry season, the plants are often exposed for months to hot winds but finally they initiate flowers and fruits. The little fruits mature with the beginning of the rains early in May, fall to the ground and germinate quickly in the moist tropical climate. The seedlings produce deep fleshy roots which enable the plant to absorb moisture from the deep-seated granite basins.

Cultivation: fresh seeds germinated in Caracas after 30–40 days. The species is very rarely cultivated and seedlings are rather difficult to transplant; even slight damage to roots may cause loss of the plant. Therefore it is advis-

able to sow seeds directly in their permanent location. The palm is an elegant one for tropical stone gardens.

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Palm Photography

KEN FOSTER

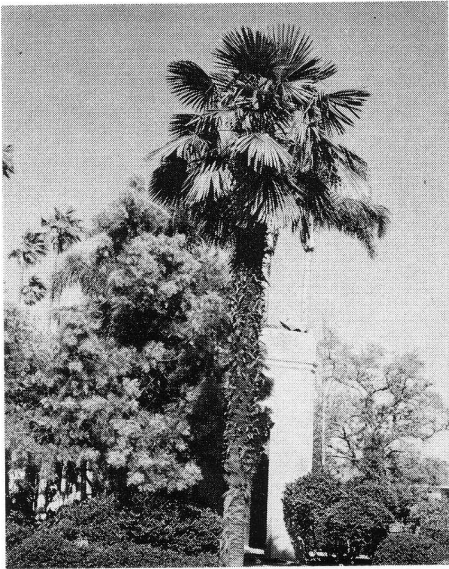
As a professional photographer, I find all phases of photography exciting, but few more challenging than depicting palms in all their natural beauty. A varied set of problems and solutions arises in the photographing of palms, differing from the usual problems of general commercial and portrait rendering. Since the palm tree is normally a stationary object, it is up to the photographer to choose the time, angle, and lighting to show the palm to best advantage. Even though this is not always possible for the botanist in the field, there are tips that can help the botanist and the everyday photographer alike.

I am always amused to see the typical "tourist-type" photographer at work. Bent low with three or four cameras around his neck along with a conglomeration of telephoto lenses and sundry

accessories, he rambles from subject to subject furiously snapping away without giving the subject the attention needed to do a good job. Out of all this, he hopes to get one good shot from rolls of film exposed, relying on expensive equipment to ensure good results. With a few simple rules and an eye to "see" in photography, even the simplest equipment can bring rewarding results.

There are two important factors in palm photography: a sharp lens in front of the camera and a sharp man behind the camera. While the more expensive camera with advanced accessories may bring ease in shooting, Aunt Betsey's old \$5.00 camera with a reasonably sharp lens should be sufficient.

This paper is not meant to be a primer on how to take pictures, but rather a guide to offer a few pointers on improv-



1. This view of a tall *Trachycarpus Fortunei* does not allow a clear view of the palm because of the background.



2. By moving the camera about ten feet to the left and nearer to the ground, an open spot is found against the sky which makes a more pleasing rendering of the subject than in Fig. 1.

ing your palm photography. Therefore, I assume you are reasonably capable technically in handling your particular camera. The basic information supplied by the film manufacturer on exposure and lighting is really quite adequate for most use.

Pick Your Angle

Palm photography calls for a high degree of angle selection. A plain background is essential if the palm is to stand out and be the center of attraction it deserves to be. The reason is that the color tones of most palms contribute to the subject, but blend in with most backgrounds of plant material in a photograph. In showing a single specimen, change the angle until a plain sky or building serves as a backdrop. Don't assume the best angle is the first one seen on approaching the subject, but rather circle the palm watching for the most interesting view of the trunk and crown, and for an uncluttered back-

ground. Sometimes changing the camera angle only a few inches makes an amazing improvement in the photo. And don't always take photos from the same level (shooting from the hip), because an angle nearer the ground will generally change the perspective, may improve the background, or may even enable you to hide some unsightly object from view.

Fill the Frame

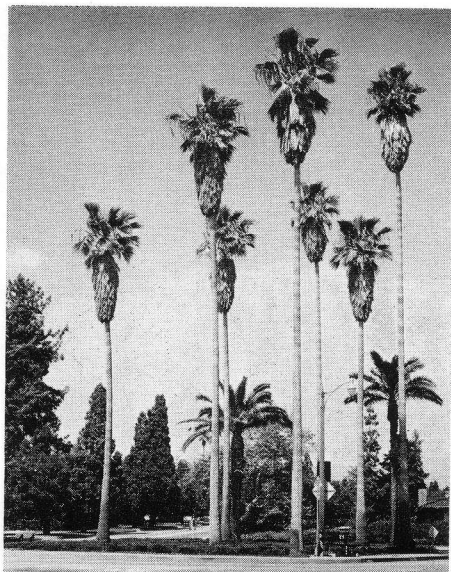
Crop your subject in the viewer as much as possible, or in a sense compose your picture. Why show unwanted distraction that can compete with the palm simply because you are too far back when taking the photo? Don't expect employees in the processing lab to know what you had in mind; they normally print the full negative.

Notes on Lighting

Lighting is important in palm photography in order to show all the detail



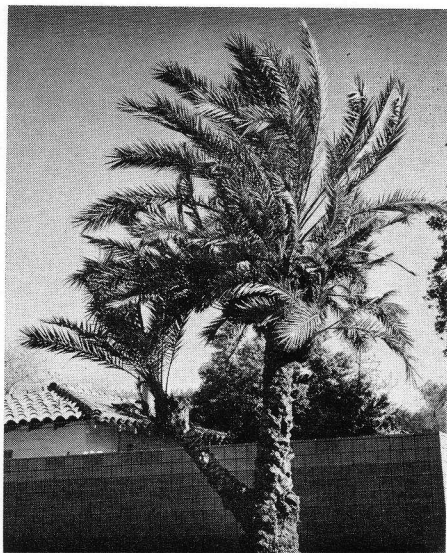
3. A group of *Washingtonia robusta* is photographed against a cluttered background. Too much foreground and vehicles mar the photo.



4. An improved angle against the plain sky and better cropping make this view of the same palms as Fig. 3 a better photo.



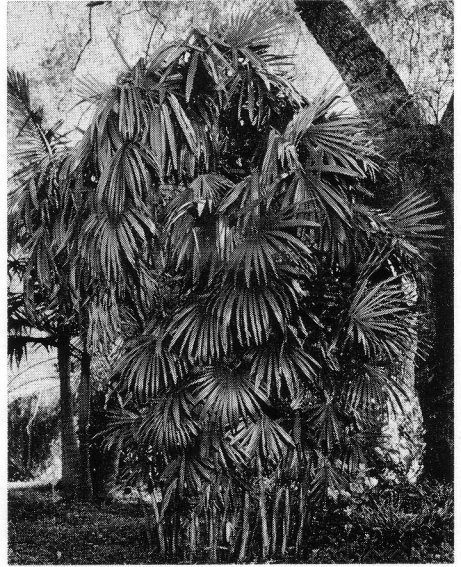
5. Unwanted distractions dominate an interesting *Phoenix* because the photo was taken too far back.



6. By composing in the camera view finder, a clear and detailed photo of the *Phoenix* in Fig. 5 is possible.



7. Poor flat lighting is obtained on this *Rhapsis* using the natural light under a dense canopy.



8. The use of flash-fill greatly improves the lighting and permits detail of the palm in Fig. 7 to be seen.

and texture of the subject. Normally the best lighting in black and white photography is what is known as three-quarter lighting—the sun to the photographer's back but somewhat to the side. This affords a skimming light on the palm coupled with minute shadows wherever there is a rough surface, thus giving a textured appearance.

A photographer is indeed lucky when he comes upon a desired palm lit exactly the way he wants it. Too often the palm is only partially bathed in sun or has the sun showing from behind the subject, making a backlighting effect with very flat lighting and no texture as seen from the camera angle. Frequently a palm is under a canopy of trees and has a dark gloomy appearance. And of course there are times when an otherwise well-illuminated palm has poor lighting due to overcast or storm conditions.

The best way to obtain good lighting is to wait for good lighting. Perhaps a palm poorly lit in the morning will look

fine in the afternoon after the sun has changed its position. But for those with less patience, or for the botanist in the field who simply doesn't have time to wait for good lighting, the prevailing light conditions must be altered or new lighting created. The flash-fill serves an important function here. The proper use of flash can create texture and tonal differences which otherwise would be lost if available lighting only were used. Flash is important in photographing a palm under dense cover to give the palm sparkle and detail. In a backlit situation, the main source of backlight can be balanced with a fill-light from the camera angle making a pleasing effect of high light and detail. Flash has its limitations; don't expect it to aid you in trying to light a grove of palms at a fifty-yard distance. There just wouldn't be enough light to make any appreciable improvement. Wait for good natural lighting.



9. Close-up view of a male *Chamaedorea Ernesti-Augusti* showing inflorescences. The detail in the photo is all but lost because of the background.



10. A white card placed behind the palm in Fig. 9 eliminates distracting background.

Selective Focus

Here is a hint when all else seems to fail in trying to photograph a palm or a group of palms in a jungle mass or with a background that does not afford any contrast to the subject matter. Simply throw the unwanted background out of focus by using a large aperture opening on the lens of your camera. This will give you a short depth of field and will tend to detach your subject from the cluttering background effect by keeping your subject sharply in focus while the background becomes softly blurred.

Is Color Photography Easier?

In a sense color photography is easier. A palm may stand out in a photograph simply because the eye sees a distinct difference in the various color tones. Black and white photography, on the other hand, is limited to varying shades of gray. What may stand out in color simply looks like another shade of gray

on black and white film. It is not as important to have textured lighting in color photography. In fact very pleasing effects can be achieved, especially on close-ups, when soft diffused lighting is used.

Close-ups Are Important

Have you ever looked at photos of palms where you unconsciously strive to see more and more detail? It is downright boring to see nothing but long shots of palms. Insert a close-up occasionally and let the viewer really see detail, especially if you can show a close-up of a portion of a palm already seen from afar. If you do take a photo from six inches to two or three feet from the palm where additional light is needed, try holding a large 40-inch by 48-inch silver card at an angle that will bounce sunlight on the subject. On extreme close-ups, even a piece of white paper will help. Try placing a piece of paper behind the palm or the part of the

palm being photographed to make a plain background.

While the tips on palm photography mentioned here are perhaps basic, there are many more that can help make your

palm photos exciting. The most important thing to remember is to "see" the photo first before snapping the shutter and then proceed to apply the technique necessary to do a good job.

COLLECTOR'S CHOICE

Reflections on a Favorite Palm

It is impossible—the more I try to think about it, the more I know it is impossible—to write about my favorite palm. How could there be a favorite palm? One better than the others? Because of its beauty? By what rule do you measure beauty? Because it will grow well in my garden here in California? Because it is rare and few have it? Because it is difficult to grow (except for me)? Or because a dear friend gave it to me for a present? Or a favorite because it sells better and provides my livelihood?

I have seen many, many palms from the distance, from close up—many beautiful landscapes of palms, singles, groups and mixtures with ornamentals of other families. But can one truly say: "There is my favorite"?

We stand in amazement before the masterpieces of *Reinhardtia*, *Microcoelum Weddellianum*, *Linospadix*, *Phoenix Roebelenii*, *Licuala*, *Coccothrinax*—they are so beautiful. Who can pass by a *Bismarckia*, a *Roystonea*, a *Jubaea*, a grove of *Rhopalostylis* without admiration, or by a single clump of *Chamaerops humilis*, venerable and 100 years old?

And also let us think of that group of palms which ekes out a living in misery, the row of *Trachycarpus Fortunei*, the plebian on the narrow divider strip of the busiest boulevard, kissed and hissed at minute after minute by deadly fumes of the exhausts, still doing its best in all its glory to rest the eye of the passing driver; or *Nannorrhops* at 9,000 feet elevation under snow, crawling along, still holding up the banner of *Principes*; and *Rhapidophyllum* which we are told will stand up, be it ever so humbly, at 9° below zero F. Or *Serenoa repens*, Florida's commoner, not pretty, but no less admirable because of its stamina, its will to survive, its perseverance.

One palm my favorite? How could I tell? Still to me, born in the Nordic country where frigid winter storms howl across the Baltic from Siberia's tundras to meet the murderous gales of the North Sea, the nostalgic longing for palms swaying in tropical breezes is ever present. It's where palms come down to the sea, silhouettes against the sky, it's there that our longing gets stilled. *Cocos* palms—*Cocos nucifera*! Standing in a magnificent grove planted one hundred years ago by Hawaiian