

Disappear or Die!

► SUPPOSE you were a fighter-plane pilot, hot on the tail of a fleeing enemy plane. Conspicuously marked with orange patterns on its wings, your quarry is an unmissable target against the green of the forest below. Then, in a split second, just as you are about to press the trigger, your intended victim abruptly disappears. Just isn't anywhere. You turn and quest frantically for him, but you never see him again.

That hasn't happened yet in this war. But in the wilds' unending drama of hide-or-be-eaten it happens over and over again every day. It is a trick of camouflage practiced by a number of bird, insect and other species, known to biologists as disappearing coloration. The common flicker shows, in flight, a conspicuous white patch on its rump, and bright golden yellow undersides on wings and tail. When it alights, all these conspicuous markings are instantly covered up. Again, one species of leaf butterfly has very conspicuous bright markings on the upper surface of its wings. These are certain to catch the eye when the insect is in the air, but when it alights it folds its wings up vertically as most butterflies do, leaving only the dull, inconspicuous, dead-leaf-colored undersides exposed.

This is only one type of animal camouflage, as described by Dr. Herbert Friedmann of the U. S. National Museum in a new number of the Smithsonian Institution *War Background Studies*.

Some of the body patterns that at first glance seem to be the very opposite of concealing really do make the animal inconspicuous at a moderate distance. The bold stripes on the zebra blend it

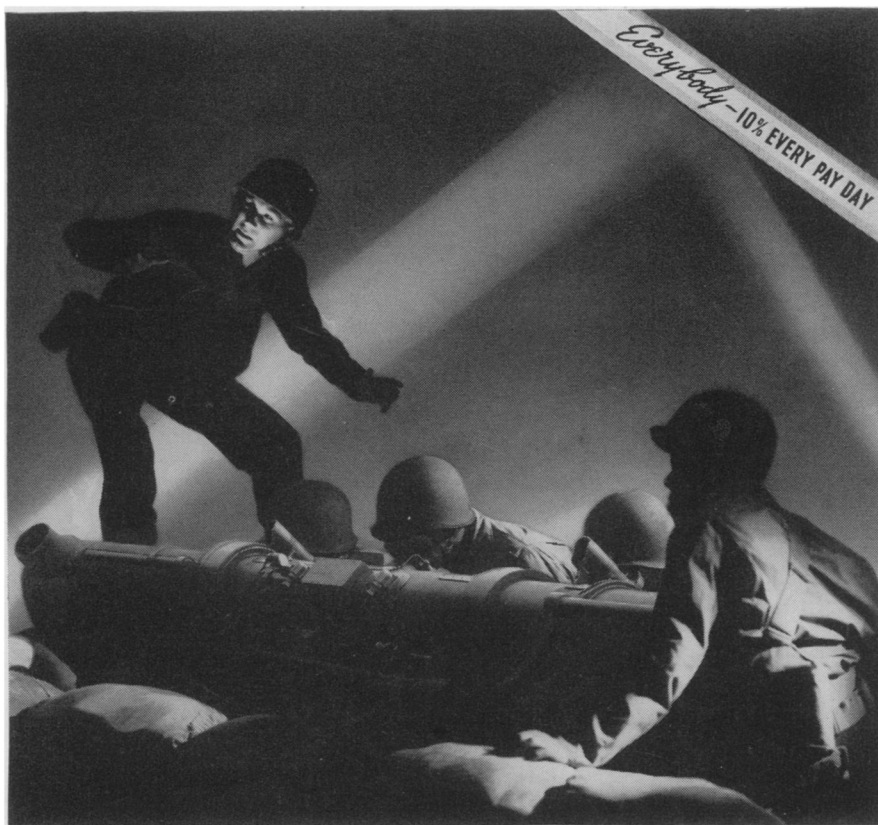
into the high grass and bushes of its background. The sharp black-and-white patterns of some birds make them practically invisible against a shore covered with varicolored pebbles.

The "flattening" effect of the common dark-above, light-below shading on animal bodies, all the way from big hoofed mammals to little fishes, is one way of defeating the tendency of shadows to give away the position of otherwise well-concealed animals. The tendency of a great many creatures to squat and flatten themselves against the ground

is another shadow-eliminating trick.

The commoner camouflage devices, like concealing pattern or coloration, disruptive and "dazzle" patterns, and so on, are so common in nature as hardly to need mention. If you have ever just barely avoided stepping on a toad, or had a partridge whirl out of the grass under your very nose, you will realize that even the cleverest of Army engineers still can go to school to the wild things that for millenia have been surviving only because of their skill in camouflage.

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