THE PART I REMEMBER

by Charley Waterman

All The

Inside Dope

obwhite quail call half an hour before sunrise, chukars walk up and fly down and sage grouse don't like grain. These things are pretty elementary but a great many people with engraved shotguns and pedigreed dogs don't bother to learn them. I am not revealing any secrets but upland gunners, especially those away from home, are not long on scientific research. To show you how observant I am, I'm going to point out some things anyone should learn within a few hours and I picked them up myself in only 50 years or so.

That quail calling business is something I learned a long time ago when I was hunting a big public area with few birds and lots of pressure. I just happened to hear some birds half an hour before sunup and went back to see if it always worked. It nearly always does. The eerie part is the consistency of the time—30 minutes before legal sunrise.

You'll find legal sunrise along with weather reports. I guess we're talking about "false dawn," when we figure exactly 30 minutes before sunup. Anyway, a lot of birds and beasties make a little noise at that time. The strangest part of it to me is that they tend to be pretty quiet until somewhat later. The time of the early call is often almost to the minute. If the weather's right you can hear quail for considerable distance and locate them with a pocket compass. Then you head for them when it gets light—or somewhat later than that.

Bobwhites make a wide variety of noises and listening to a quail-call tape helps you separate them from a lot of other whistlers, tooters and tweeters. I confess that the other morning I heard something I wasn't

really sure of—but there were some distinct quail noises before and after it. I am not worried about your finding all of the quail because bird hunters are not noted for early starts in the morning.

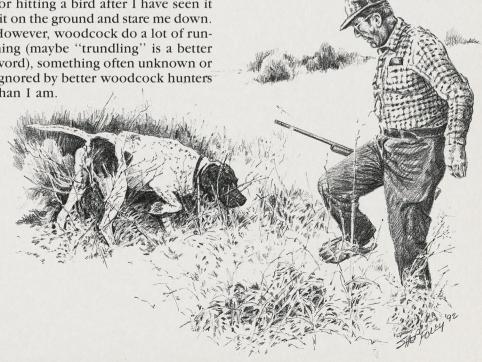
With bobwhites, the "edge" business is especially strong and they're consistently found at the break from heavy cover (resting and roosting) to more open country (feeding). The more pressure, the shorter the time spent in feeding areas and time of day is critical. Weather changes things but I think the most consistent time is late afternoon when birds stick close to thick stuff. As one expert said, they can "make a living" in 15 minutes if hunting pressure is heavy, and be back in the brush after feeding that long.

Woodcock are noted for holding tight and it's not unusual to see one scrunched under a pointing dog's nose—a circumstance which generally causes me to waste a shell. Like many others I am not programmed for hitting a bird after I have seen it sit on the ground and stare me down. However, woodcock do a lot of running (maybe "trundling" is a better word), something often unknown or ignored by better woodcock hunters than I am.

The best example of trundling woodcock I have noted was with Pete McLain in Louisiana. He had coerced me into a woodcock hunt in an area where the briars are sticking each other and the rain came down steadily. We used two dogs and they performed elaborate gumshoeing sneaks (having to crawl much of the time) as the birds moved along ahead of them. The points were a mite unsteady and many of the birds eventually flew after accidentally reaching small open spots.

Anyway, the point is that I have seen many hunters who simply didn't expect woodcock to move much and often called dogs away from birds





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Wing Shots

By the time this issue reaches your mailbox, you probably will have had a shot or two at dove and are getting ready for the season opener on all the other upland birds that'll keep you hoofing it over the hills until well into next year.

And, if you're the upland hunter who wouldn't go in the field without a dog in front of him, it's time to get it in shape both physically and mentally. Most of us tend to doze off during the summer months and forget about the training and disciplining that gun dogs should have yearround. You only have a few weeks left, and to get a dog into good condition takes at least eight weeks. If you haven't started conditioning by now, you're probably too late, but some conditioning is better than none at all.

Wing & Shot Associate Editor Roger Sparks and Gun Dog Contributing Editor Bob West recently completed a series of four videotapes on dog training and care. These tapes will be available from Wing & Shot in November and December, just in time for Christmas.

West and Sparks teamed up for a definitive demonstration of the electronic training collar. They eschew the old-fashioned "punishment" training techniques in favor of "avoidance" training, a much more effective and acceptable way of reinforcing trained commands. This is the training tape for would-be collar

The three other video training tapes are WHOA Training, Train to Retrieve and Emergency Field First Aid for the Gun Dog. These tapes are very detailed; once you watch them, you'll have few, if any, questions about what to do when training your dog to WHOA or retrieve, or how to give your dog emergency medical attention in the field. Gun Dog magazine's Veterinary Clinic columnist, Dr. Tom Holcomb, joins Bob West in describing and demonstrating first aid procedures. We'll have more information on how to obtain these training tapes in our Dec/Jan Wing & Shot.

In this issue, Joel Vance has his an-

nual report on pheasant and quail hunting prospects in the key birdhunting states across the nation. It looks pretty good this year. There are some areas of the country where bird numbers might be down, but, all in all, with a little work, you should be able to get into the birds this year.

The Animal Welfare Foundation, an organization which promotes the humane use of animals, is one of the leading organizations in the country today which keeps a close watch on the activities of People for the Ethical Treatment of Animals (PETA).

In its latest attack on PETA, the Foundation, citing figures from the National Charities Information Bureau (NCIB), says PETA fails to meet several acceptable charity standards. The NCIB report says PETA spends too much on fund raising and too little on programs for a responsible charity. According to the report, 42 percent of PETA's organizational expenses are directly related to fund raising, and just 20 percent is directly tied to "research and investigations" into "animal cruelty."

The Animal Welfare Foundation's president, Harold DeHart, says, "First PETA suggests donations will be used to help animals, yet nearly half are used to raise more money." And, De-Hart says PETA's mailings suggest concern for animal welfare, yet the group's true goal is to eliminate all use of animals.

We think Congress should look into PETA's status as a charity. They set the guidelines for the Office of Personnel Management to make that assessment. What you can do is write your congressmen, all of them, and tell them you question whether PETA qualifies for 501(c) (3) tax status, and that you think it's a political advocacy group, which doesn't meet the requirement for listing on the Combined Federal Campaign register of charities. Ask them to have the IRS provide them with a specific, audit-based determination. PETA is no more a charity than are the Republican or Democratic National Committees; it should be listed as a political advocacy and fund-raising

SCORING ON SCALIES

by Dave Zinn

hat's better than working Arizona's scaled quail country with your favorite pointer?
Working the same cover with three

or four dogs. Like eastern Montana's "big sky" Hun country, southeastern Arizona's scaled quail grasslands can stretch for miles, offering few clues to where the birds are. Staunch, wide-ranging pointing dogs in multiple quantities can make all the difference in the world.

Take a late season hunt a couple of years ago. Dennis Tressider, a young Phoenix printing executive and his lovely wife Lynn met me early one January morning at a rendezvous deep in the heart of Arizona's scaled quail corridor, east of Tucson. Dennis brought his Brittany, Jessie, his young Vizsla, Sam, plus another Brittany that Dennis was exercising for a friend. I had my four-year-old English setter, Bandit. Conditions looked great. A cold, brisk breeze and threatening rain should help scenting the birds, I noted. The dogs milled about, greeting each other, while waiting for us to move out.

Except for a windmill a quartermile away and a lone hill in the far distance, the bunch grass and tabosa cover stretched monotonously in every direction, a gray-white frosting on a ten-mile-wide pancake. But the windmill spelled water, and in Arizona water spells birds, and that's where we headed.

Dennis is an old hand at scaled quail hunting. His experienced Brittany bitch, Jessie, excels on this bird. Jessie was at her peak on this hunt, ranging just within gunshot, quartering the field in front of us without command, working the cover like a veteran. Dennis's other two dogs and Bandit joined in, crisscrossing in front of us, working together without problems.

Suddenly Jessie froze. For once, the other dogs honored. Dennis and Lynn moved in on the point. Our

first covey, twenty-five birds, burst from the grass, turned into the wind and scooted a quarter of a mile before dropping in and disappearing in the grass. Dennis, a dead shot when he concentrates, dropped a pair on the rise. The dogs broke on the flush and competed for the finds without command. Jessie and Sam won the race. In no time at all, Dennis was showing me my first look that season at scalies.

Scaled quail are not a major factor in Arizona's bird hunting season. Total quail bag numbers in the state vary from a high of two million in a great, wet season (1979) to around 500,000 in a poor, dry year. Eighty to ninety percent are Gambel's. Sharing the balance with Mearns, scalies make up ten percent or less of the kill. For example in 1969, 63,000 hunters averaged five days in the field, collecting 1.3 million Gambel's quail, but only 30,000 scaled quail. In 1988-89, 55,000 hunters were limited to only 625,000 Gambel's in one of Arizona's driest seasons on record, but still managed to drop 49,000 scalies, primarily because southeast Arizona experienced more rain percentage-wise than the rest of the state.

Good scaled quail grassland cover rates only secondary cover status for Gambel's, who prefer catclaw, mesquite and cactus to grass, and vice-versa. Where the birds share the range, look for Gambel's in the washes, particularly under desert hackberry during the midday heat peaks. Scalies, however, roost in heavy grass cover, usually high on the ridges, and can be found in this same cover most of the day. Look for them on the sunny side in cold weather and the cool, breezy, north facing slopes when it is hot. They do favor midday cover under a Chamisa bush, an index plant for this species, similar to the desert hackberry for Gambel's. This is no recent discovery, but rather a point made long ago by Aldo Leopold in his

classic book, *Game Management*, back in the '30s.

Scalies have all the traits of Gambel's quail, only magnified. They run farther, flush farther and when finally separated seem to hold tighter than Gambel's. It might take two or three covey flushes in a row to spread them, but by then scalies or "blues" seem to hold almost as well as Mearns quail, Arizona's classic bird dog quarry assuming you are working good grass cover. This makes for delightful singles hunting, point after solid point by the dogs—upland hunting at its finest.

Scalies have all the traits of Gambel's quail, only magnified.
They run farther, flush farther and when finally separated seem to hold tighter than Gambel's.

hunter would do, and reflushed a single. Jeff bagged that bird on a tough crossing shot.

These blues acted like ruffed grouse. They took full advantage of their cover and terrain, dodging in and out of trees and flying downhill. Birds that landed in conifers either rocketed out before we could establish gunning position or waited until we walked past before exiting their cover. We learned to pick windows of daylight in the conifers as we swung through what skimpy targets were offered.

I redeemed myself a bit on the tougher shots, then blew an easy chance in the open. My dog ran out the bird from heavy cover, where I could hear it running, to an opening where it ignited into the mountain air. I missed a wide-open shot at 20 yards and then at 30 yards. Oh, for a third shell! The blue was large, probably a mature male, and would have been ideal for my collection.

Later that afternoon we hiked to higher ground, where we found more birds—mostly males—and I managed to bag a handsome specimen. Altogether, we flushed 20 grouse and killed four. Only one bird presented a stay-in-the-tree shot, which we declined.

The area we hunted contained Douglas fir, limber pine and aspen along fairly steep slopes at 9,500 feet. Looking to the west from our vantage point in the Big Belt Mountains, I could see the Elkhorns and the Tobacco Roots to the southwest. Far below, the road stitched its way up the mountain, appearing and disappearing among taluses of broken shale. The ground cover was lupine, low-spreading juniper and grouse whortleberry. This was classic blue grouse country.

Blues are unusual in that they are reverse migrators. Instead of moving down from higher altitudes in fall, like most game animals and birds, these grouse go higher, often to treeline. No one really knows why. One theory is the lack of predation (blue grouse lose only an average of 20 percent of their population each winter, compared to losses as high as 70 percent for ruffed grouse). Another theory contends that the blue's winter staple is conifer needles, and what better place to find them than in the high country?

In spring, dominant cocks and a

few subordinate males migrate to lower elevations where they set up hooting territories in the open forest near meadows and other clearings. Generations of blue grouse display for hens, which arrive later, from the same logs, limbs and trees, but a dominant bird may actually have several strutting spots. They do not drum, like ruffed grouse, but rather fan their tails and strut, exposing air sacs on their necks like balloons of purple (usually true of the interior subspecies, which are often called dusky grouse) or yellow (typical of the coastal subspecies, which may be labeled sooty grouse). Eyecombs, also prominent in spring, may be vellow, red or orange.

After breeding, the males return to the high country. Hens and their broods take their time following throughout the summer while they feed on insects and ripening berries and fruits at increasing altitudes.

Their winter diet of pine needles, spring display tactics, naivete and love of deep woods suggest the blue grouse is similar to the spruce grouse, from which it may have evolved. On the other hand, blues occupy territories similar in size to ruffed grouse and certainly closer together than spruce grouse. They are similar in size to ruffed grouse, too, averaging about 2½ pounds for cocks and 2 pounds for hens. To my palate the light meat of the blue grouse is a close second to that of the ruff.

Blue grouse lack the intricate and dazzling color scheme of their forest cousin, though. An overall slate-gray in color, blue hens have a dark brown mottling on the chest and sides whereas the cocks are mostly gray. Chest and neck feathers may be tipped with white and the underparts are mostly whitish or gray. Their dark tails often sport a band of pale blue.

Range of the blue grouse is from southern Alaska and western Canada south to western Nevada, southern California, western Montana and Colorado. Small numbers live as far south as Arizona and New Mexico.

Habitat loss from fires, overgrazing and aerial spraying for insects impacts blue grouse far more than do hunters. With the exception of the ptarmigans, the blue is the most underhunted grouse on the continent, even though he is a legal target in 11 states and is fair game in Canada

and Alaska. Probably less than a half-million are bagged each year in North America. Throughout my western itinerary, I saw one other blue grouse hunter, and he had had one bird in his game bag.

Our successful hunt in Montana was a prelude to more memorable Big Sky country experiences. Most people think of Montana as a stronghold of big game habitat and classic trout streams. True. But the state also offers some of the best upland gamebird gunning in the country. The northcentral bench and coulee region beckoned with sharptails and Hungarian partridge. Farther east, the grasslands beyond Lewistown would serve up these species plus sage grouse and many pre-season pheasants, which drove me and my dogs to distraction. Then it was on to windswept North Dakota for more experiences with sharptails.

Winds, ancient and now. A breeze with northern bent sends the cold, clean smell of glaciers, and it stirs the ocean of shortgrass prairie. The wind shifts and with it comes images of buffalo, black humps in sharp relief against the tawny grass. It ripples the leaves of the bullberry bushes that are tucked into draws among the hills, and the bullberry leaves show their polished bellies of silver. The fickle wind shifts again. Now it is late in September and the swallows are gathering and the little bluestem has rusted on the hillsides. With the wind comes the scent of sharptailed grouse. A man and a dog are walking a grassy slope above the bullberries and the dog suddenly stiffens to a point.

Time easily stands still in the sharptail's world, and that is one of the reasons why—after the noble ruffed grouse—they are my favorite gamebird. Join me next issue and I'll share other reasons as well.

Tom Huggler's new all-color, hard-cover book, Grouse of North America (NorthWord Press), with all new material separate from this series, is now available. Autographed copies of a special signed-and-numbered limited edition, authorized by Columbia Sportswear Company, cost \$39.95 each, plus \$3 postage and handling. Order from Outdoor Images, P.O. Box 80320-Delta Branch, Lansing, MI 48908-0320. Or call (517) 323-0868—Ed.



• QUAIL •

Dennis had marked the birds' flight and we pushed the dogs to where they landed. This time we were in luck, the quail had separated, holding firm, offering us the classic singles opportunities we were looking for. Again, Dennis's experienced bitch, Jessie, was giving lessons to the other dogs, locking in on single after single, perfect on almost every bird. We crossed and re-crossed the area, being rewarded by a single or two on each pass. Most of the time we had to move in to flush the bird, kicking at a grass clump, or stomping our feet. This is similar to flushing Gambel's out of heavy grass, rock or prickly pear cactus cover. I have repeatedly worn out the right toe of my hunting boots doing this season after season. Another good trick was stopping and standing still. This works just as well on Arizona's quail as it did back in Pennsylvania on wily cock pheasants. They simply can't stand the silence. Occasionally a bird will flush wildly without any action on our part or the dogs. We usually fire at these flushes, contrary to good form with the dogs. I don't recommend this with young puppies, however. They soon figure out that a flushing dog is desired, lunging at the birds instead of locking up. I once lost a full second season with one of my setters, Rebel. I was forced to re-teach her to be staunch on point after too many shots at wild flushing Gambel's in her first field season.

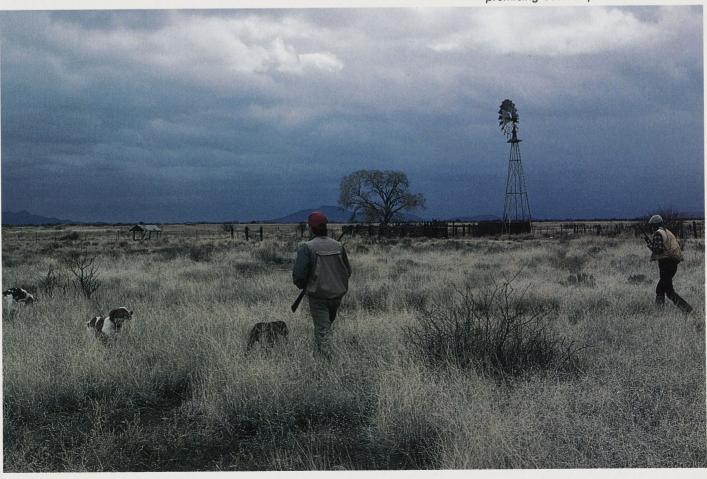
Our next covey split on the flush, about ten birds to the right, ten to the left. I find the Arizona quail generally curve in flight, eventually heading into the wind, or directly downwind to extend their flight as long as possible. We split up. Bandit and I headed downwind, finally catching up with our share of the birds. They had spread out and were holding tight, making Bandit's job a little easier. Without competition

from the other dogs, Bandit locked onto single after single, almost automatic, at least for her. My shooting is always suspect, and that hunt was no exception. I did manage to drop one in three birds, but there was no excuse for the misses: perfect points, perfect holds, open shots. Luckily, Bandit couldn't speak, but I did catch her giving me a disgusted look that said, "I do everything right and you still can't drop the bird. What's your problem?"

The threatening rains never did show up, but the cloud cover and moist air stayed with us all day, making the hunt one to remember. We moved back to the truck for lunch after that second covey and then to a second spot not far away that Dennis remembered. Again we used water as a guide, a small pond or cattle tank outlined in heavy brush in the distance. Working toward it into the wind, we hadn't gone far before Jessie locked up again.

This time it was on a single, a Gambel's quail that Dennis dropped within thirty feet of the point. Ap-

Dennis and Lynn Tressider move out in promising scaled quail cover.



parently we had interrupted a covey of Gambel's that had separated and were feeding. The other dogs joined in and we had more great singles action, spreading out and working the dogs over a large area.

We were now in edge cover, a fiftyfifty mix of heavy grass, mesquite, creosote and catclaw, offering a fiftyfifty chance at either quail species. The birds appear similar on the rise and it wasn't until Dennis recovered tunately it turned out to be a Mearns. What this covey was doing miles from any oak cover, we'll never know.

Joel Vance stated in a recent article in *Wing & Shot*, "Legs make quail, too." He's right on target, at least for Arizona's scaled quail. Two days on scalies that weekend left us and the dogs leg weary and foot sore.

One area I used to hunt near Tucson held both scaled and Gambel's cactus infested flats. Once hunting Gambel's northeast of Phoenix, I was having a terrible time keeping my two setters cholla free and hunting. Suddenly two other hunters showed up with a brace of German shorthairs wearing rubber boots duct-taped to their feet. Their dogs ran rings around my setters.

I recently quit hunting my dogs in Arizona below 4000-feet elevations, moving up where the cactus is limit-



Dennis and Lynn Tressider concentrate on a single scalie flushing from typical southeastern Arizona cover.

that first bird that we knew for sure what we were into. This reminded me of another incident when Dennis and I had worked a preseason Mearns quail survey with the Arizona Game and Fish Department. Scaled and Gambel's were legal at the time. After the survey we took the dogs east of Sonoita, looking for scalies. Just before dusk, Jessie went on point and Dennis dropped one bird out of the covey rise. Jessie did her usual good job of retrieving and Dennis was soon admiring the find. Unfor-

quail in good quantities. Unfortunately they were both outnumbered by far by teddy bear and chain cholla, terrible "jumpy" stuff that detaches and imbeds itself on both the dog and the hunter in quick order. I had to carry a pair of pliers and a comb and peel them off the dog about every half-hour. But it paid off, in the good years we could bag a near limit of quail almost every trip. Sam, my first desert setter, quickly learned to avoid most of it, but sometimes showed up with cactus balls on every foot. Leather or rubber boots are sometimes seen on dogs being hunted in these low desert, cholla ed to prickly pear. Prickly pear is easily handled by the dogs. More importantly, when their ruby red fruit ripens in late fall, prickly pear are an excellent source of superb scaled and Gambel's quail hunting. These clumps of cactus offer the best of both worlds, excellent protective cover and a ready source of food. Almost every kick at a clump produces a flushing bird, red faced from feeding—instant action.

But years ago, on one of these lowelevation scaled quail hunts, we had hardly left the truck when Sam, my first English setter, pointed and held a huge covey of scalies. The covey flushed before I could get in range. Fifty or more birds took to the air, flying a short distance before dumping back into the heavy grass and cholla cover. "We're in," I thought as Sam and I moved in on the birds. Think again. We never put up a bird despite carefully covering the near cover and then the hills encircling the area.

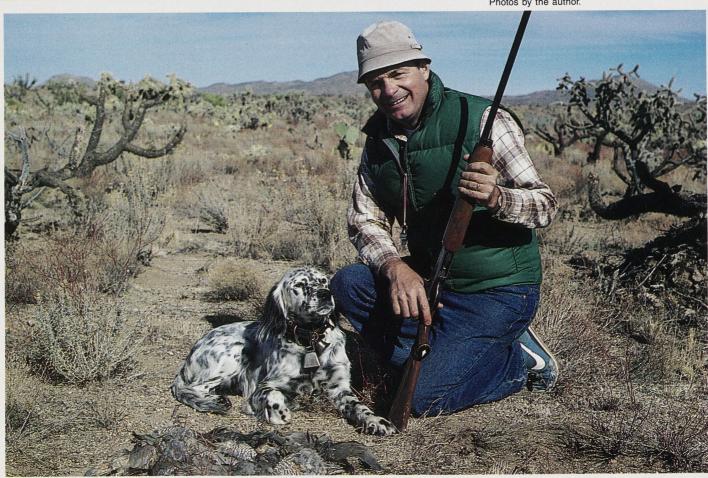
They simply disappeared. It's no secret that scalies run, but that cover included thick, high grass: perfect holding conditions. I still wonder where those scalies went. Despite the cholla cactus problems, those low desert foothills gave us the best of both worlds, early morning scaled quail on the high ridges, noontime

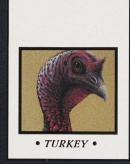
Gambel's in the dense, cool, hackberry-covered washes. We would invariably start Sam working the open ridges early in the morning, hoping to catch scaled quail still roosting or just starting out to feed. Somewhere on the ridge he'd find them, usually pinning them near the top until we could catch up. Invariably these scaled quail coveys would flush and land as a group at least once, then run and flush again before breaking up and holding in the thick grass, finally providing great singles work for both us and the dog. Clear, blue skies, bright sunshine, a sea of pale yellow grass waving in a cool, brisk breeze, a white and black setter locked on point high on the ridge top-a perfect picture as we moved in for the action. \Box

Dennis Tressider takes aim as the dogs break on a covey flush of scaled quail.

Author and his English setter, Sam, with a mixed bag of scaled and Gambel's quail taken in a cholla-infested Arizona low desert grassland area. (Note the sneakers.)
Photos by the author.







HUNTING THE PRAIRIE GOBBLER

by Conrad Vollertsen

Sunrise prairie hunters try to call birds off the roost as do their eastern woodlands brethren.

t was a sunny, sage-scented April afternoon out in No Man's Land along Coldwater Creek in the Oklahoma panhandle. The sandhill cranes were drifting north and called down out of a sky so high and blue, and from a distance so far, you almost doubted you heard them. Bryon Test of Guymon and I were hunting turkeys. We had found some, too.

We had spotted with binoculars a nice little drove of gobblers, fifteen or so, nooning under some big cottonwoods bordering the Coldwater. We laid prone, propped on our elbows, on a little, sage-brush covered sand hill and watched the big birds alternately stand in the shade shaking their feathers and preening and easing out to chase grasshoppers in the sunlit buffalo grass and little

bluestem, but always they returned to take up resting stations in the shade of the trees like trout that dart-out from behind streambed rocks and then return to the dark side of the rocks.

It was the laziest time of the day, but we were very interested in what we watched. We were hunting like lions, lying on our bellies and making coldly calculated deliberations from behind a screen of good cover

Bright Skies, Barrel QUAIL

essayist, on the Central Plateau region.

BY VIC VENTERS

echnically speaking, oxygen-poor seemed a better description for it. I stood atop a basalt-strewn ridge in the Morelos province of Mexico, panting for breath, sucking thin mountain air into my heaving chest. The climb up the steep hillside to where the dogs had locked on point had been hard, but not that hard. I was simply out of shape.

I hadn't even made it up the hill in time to fire my gun. My father, on the other hand, had dropped a triple from our expedition's first covey rise. John Carlisle, our host and booking agent from Georgia, was sharing in my mock discomfort. "If all you North Carolina boys shoot like that," he told my father, "I'm going to be in real trouble." Firing twice on the covey rise, John's only victim was the illusion that open-

flushing quail are easy targets.

"At least my shooting won't worry you," I assured him, "just wait and see."

Down the ridge two pointers quartered back and forth across the little piece of Sierra Madre hilltop, tails wagging, noses to the ground. I gulped in a little more air, then clambered down the spine of the ridge toward the dogs, flanked by an arid patch of harvested grain below us on the right, a brushy canyon to our left. Out of the canyon rose a steeper, taller ridge that crested as an extinct volcano, the towering hillside guarded by organ cactus, prickly pear, staghorn acacia, and mesquite.

A palette of muted greens, earthen browns, and raw volcanic contours, the Morelos landscape is given to "a certain aristocratic sterility," in the words of Alfonso Reyes. And, I should add, absolutely brimming with barred quail, a princely little gamebird found only in the hills of Morelos and the surrounding

provinces of Mexico's Central Plateau.

Ahead, the dogs again shuddered to a stop, head and tails high and stiff, bodies cocked tight in that timeless ritual between man, dog, and bird. "Pointa," yelled Manuel Arena, our guide and dog handler. He gestured us forward with a hurried wave. John and my father approached the point briskly, walking past the dogs' rigid forms. Nothing yet. A few steps more, then—almost predictable in its unpredictability—the

covey went skyward, a feathered volcano of buff and grey. My father took two down, while John again punched a couple of holes in the air.

John snapped the over/under open, flicking two empty shells onto the dusty ground. He pushed a fresh cartridge into the Ruger's smoking breech—there!—a late flyer jumped to flight from an acacia bush sanctuary,

brown wings pumping like staccato bursts of a silenced burpgun. This time John dropped the would-be escapee in a ball of feathers.

After I retrieved the bird, the barred quail's moniker became obvious. So named for the black and white barring on its underside, the crest of its head sported a stylish little black and brown top-knot that swept backward like a feathered crown. In the

sunlight it glimmered like a burnished copper penny.

Barely 10 minutes later, the dogs were pointing again at a stone wall where the ridge began its southward slope toward a harvested field of sorghum. Singles or another covey?

My turn this time—a covey as it turns out—and I shot a triple, dropping one bird in the middle of a dry, cattle watering trough. Surprised? Of course. Ebullient? Let's just say I got a bit too smug and spent the next few moments trying to suppress a smile that threatened to split into an ear-to-ear grin. Even Manuel, the ever-sto-ic Mexican, seemed impressed. "I like your shooting." "Boom, boom, boom," he said, brandishing his finger like a kid with an imaginary gun.

Down in the field, the dogs continued to work a *milpas*, an ungrazed, weedy patch, where the grain field ended and another hill began its climb toward bright blue skies. Around a lone acacia tree, the brown and white pointer locked and the lemon and white backed—a perfect point in the open. This covey would have no chance. John stood back with a videocamera to record the action; my father and I marched forward. At the rise, I picked one bird out just like the experts advise, swung through him, and pressed the Remington's trigger. And again. And again.

No feathers this time, no falling wings, no calls of fetcha, fetcha from Manuel to his dogs. Three shots, zero quail. I turned to find John at my back, his widening smile only partially obscured by the videocamera pointed my way. "You're right," he beamed, "I'm not worried."

I wouldn't be the last of our shooting party to leave my ego in the dust on this trip, but then barred quail and big egos probably don't go well together. Fast, small, well camouflaged, the barred quail has the in-air moves of a Spitfire fighter. The barred quail (*Philortyx fasciatus*) is found nowhere in the world but on the western slopes of the Sierra Madre mountains in the provinces

of Morelos, Puebla, Jalisco, and Guerrero, just south and to the west of Mexico City—an endemic species, as biologists like to say. The bird is an interesting character, possessing the racy lines and crested head typical of mountain quail species, yet it holds tight for dogs like a bobwhite.

Our party had come to Morelos for barred quail in the latter half of March. If that seems a

little late for quail hunting, you're right. The reason for March hunting is firmly rooted in biology, however, because barred quail don't breed until August and September. With late-maturing birds, the season doesn't begin until mid-December, and it lasts through mid-April.

Barred quail, or *copetones* as they are known locally, are birds of the arid hillsides, especially abundant in hilly thorn thickets, brushy canyons, and *milpas* near agricultural fields, where they feed on sorghum, sunflower, and other grain crops. Bobwhites—from a smaller and darker subspecies than ours—are also found in Morelos, mostly in the agricultural fields.

Under normal hunting conditions, Manuel guides a pair of dogs from horseback, while clients ride in padded seats on the back of trucks. When the dogs point, the truck drives up, you get out, shoot, and hop back aboard. Fresh dogs are alternated in the afternoon or as needed. Call it plantation quail a la Mexicano. You cover a tremendous amount of ground this way and put up lots of birds—20 or more coveys per day if you hit it right. The technique works best, however, when the birds are concentrated down in the fields and *milpas*, rather than up in the hills or down in the draws.

By the way, have I mentioned our shooting party wasn't in Morelos under normal hunting conditions?

With our arrival, late March blew in extra hot and dry, the air at ground level dusty enough to sweep with a broom. The heat pushed the normally abundant

Continued on page 79

BRIGHT SKIES, BARRED QUAIL

Continued from page 64

bobwhites out of the *milpas* and grain fields down into the deep, cactus-filled canyons where they were largely impossible to hunt. That left us mostly barred quail, which was fine, but their hillbilly habitat preferences robbed us, for the most part, of the luxury of hunting from the trucks. That meant footwork for us—plenty of it, much of it uphill in direction. If the first day busted egos, the second day would test our legs.

"There are many copetone here," said Manuel, sweeping his hand across a landscape littered with extinct volcanos. "Many." Plenty of mountains, too, it seemed. In dawn's somber light, Chuck Edwards, an experienced wingshooter from Kansas, picked up a 20-gauge over/under from the

array of pumps, autos, and other over/unders Manuel had spread on the truck's hood.

e were using Manuel's guns because omnipresent Mexican red tape is even more tiresomely petty than usual in this region, and consistently getting guns in is a difficult proposition. Fortunately, Manuel has a good selection, and they all work.

In practice, Chuck snapped the Ruger into firing position. He did so with Churchillian precision—narrow stance, stock under armpit, lead hand forward, gun pushed out, then up—one sleek, fluid motion.

Interesting. "What do you shoot at home." I asked.

"A Piotti."

Figured. A King model, if my memory serves me. Sixteen-gauge,

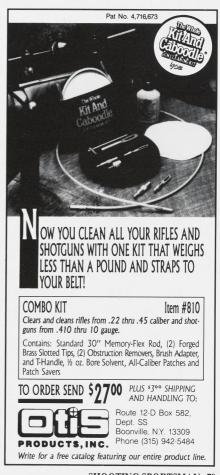
too. I was as green as an August watermelon. That's a gun I've drooled over many a night while poring through fine-gun catalogs. One day ... maybe.

Manuel unloaded his pointers, and his bird boys grabbed plastic, one-liter water bottles for the dogs. There were no clouds in the clear, azure sky, and it was still cool at dawn. I shrugged off a twinge of goosebumps as Manuel led us toward the hills.

The first three or four coveys of barred quail came pretty easy. Chuck shot as you would expect—well. The birds were feeding in the fields, and the dogs worked them perfectly. Manuel is a renowned bird-dog trainer—one of Mexico's finest—a rarity in a land where more dogs are probably looked







upon as taco filling than hunting tools. His pointers are classy: well-honed, sleek, muscular, go-till-they-drop machines. After each point, Manuel would reward each dog with drink of water from bottles, precious fuel in Morelos's bone-dry hills.

The next several coveys were a little tougher. As the sun and temperature climbed higher, so did the birds, moving up the hillsides toward shade-providing brush. We followed. Were you to design a sporting clays course, you could find no better inspiration than the barred quail and volcanic hills of Morelos—birds that fly serpentine paths down cactus-studded slopes, covey rises on bare ridgetops.

Nor was the walking unpleasant, at least until the morning chill burned off. As we hunted through the morning, I couldn't help but notice that Manuel was leading us through a valley that drew ever narrower as the two flanking ridges converged at the end. It didn't take a brain surgeon to figure there was only one way out.

Up.

By 11:30 or so, we were starting to cook—white boys sunny side up. The birds wouldn't move much longer, either. The Mexican sun hung high above us, big, bright, and aggressive. With his dogs hot and their bottled water supply used up, Manuel steered us toward a cattle

watering trough at the base of the large, steep hill where the valley converged in a "V."

And then Manuel screamed. "Whooaaa!" The dogs had run through large covey beside the water trough. Out of range, the copetones scattered up the mountainside. As singles from this covey landed, another covey flushed. Manuel was less than happy, to put it mildly, with his dogs' performance lapse. In Mexico, I've discovered, there are two types: those that vell and those that are yelled at. In this case, Manuel velled, and the dogs were yelled at. They listened, big-eyed and cowering, tails wrapped between their shivering legs. Manuel tossed the dogs into the water trough.

serious punishment, the pointers swam about lapping water in loud, greedy gulps. The bird boys dipped cups in the trough and drank as well, then offered their cups to us. Inviting in the heat, just a sip of untreated water would probably have produced a long and unpleasant visit from a fellow named Montezuma. I licked my lips instead.

Cooled and watered, the dogs were pulled from the water. "The hill, Senior?" Manuel asked, pointing to the base of the slope. He seemed anxious—almost insistent—

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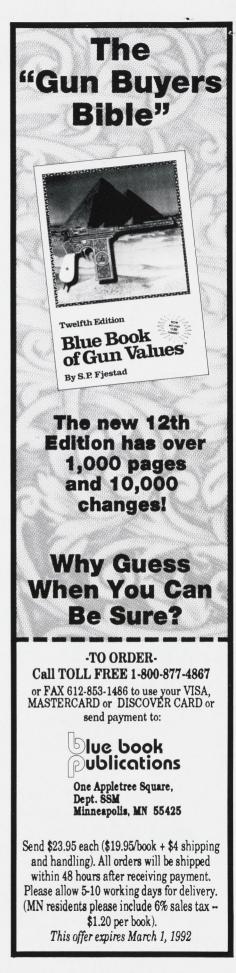
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IF YOU WANT TO GO

As far as I could determine, Manuel Arena is the only outfitter offering guided hunting for barred quail in the Morelos region (and I believe the world). Hunting expeditions typically last five days, of which three full days are sent hunting. A typical day has a dawn hunt till midday, break for lunch in the field and a siesta at the hotel, then back in the fields for an afternoon hunt. Prices are quite reasonable, especially given the quality of the hunt, services, and accommodations.

On your way in and out, you'll be picked up and dropped off at the Mexico City airport by either Manuel, his helpers, or by Hotel Cocoyoc staff. The drive from Mexico City to your base at Hotel

Cocoyoc in the town of Cuatuala, Morelos, ranges from one hour and fifteen minutes to two hours, depending on the traffic and time of day you arrive.

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as if to redeem the honor of his dogs. "The hill?" he asked again.

Ah, The Hill. Small mountain, actually. Obviously full of birds. Four hours ago, we'd have tackled it without second thought, like Redcoats up Bunker Hill. Now its steep sides were forbidding, laced with head-high brush and cactus. A collective sigh. Chuck declined, my dad and I nodded yes, hesitantly. We were younger, after all, perhaps more stupid.

Chuck trudged back to the truck for a nap, and we climbed. We were instantly into birds—singles from the two coveys. But they weren't flying or holding this time, running, instead, up the hill. We pushed upward. The world around us collapsed from the seeping vistas of Morelos to The Hill, a bird dog's wagging tail flagging us forward, a boot-step staircase over boulders and brush. A bee stung my father, a cactus bayoneted my leg. The sweat running down my face evaporated before it could drip from my nose.

At hilltop, the trailing dogs jerked to a halt as if they'd hit the end of a

tether. For *copetone*, running room had run out. My heart was a jack-hammer—from exertion, heat, excitement, I couldn't tell. Then the birds were up, wings flailing, burring, some downhill to the left, some to the right, others over the top. We sprayed cordite and lead. Dare I say the Mother of All Coveys? No, let's just leave it at huge—30 birds, maybe more. It was probably the two coveys combined.

With four *copetones* down, Manuel and his boys searched until they found our kills. "Nice covey," he said, with a grin big as Texas. "Nice covey." His dogs—his honor most important—were redeemed. He motioned us over and gestured to another hill across the valley. It was even larger than the one we had just scaled. "Many *copetone* there," he smiled. "You want?"

There was dust in my mouth, and the hill seemed very far away, so we opted for lunch instead. Under a shade tree, Manuel unveiled a big spinach soufflé that appeared, well, suspiciously green. It smelled great, however, and tasted even better. Nobody said Mexican food has to look pretty; it just tastes good. Manuel followed this with a spread of cactus salad, spicy meats, cheeses, fresh fruit, bread, Mexican sweets—don't get me started. It was his wife's cooking; he's a lucky man.

It was a time for laughs and camaraderie, to share an understanding, when the flush of hunting success brings men from vastly different backgrounds close, if only fittingly. It's real, though, and in itself seems almost worth the price of admission. Manuel was talking excitedly. "Tomorrow, we go where there are many bobwhite," he told us in his broken English. "Many, many bobwhite. Easier walking. Not so many hills. Flat ground. You like?"

Yeah, we like. I popped the cap off a green-bottled Victoria and settled back at the base of our shade tree. In the branches above, two emerald-flecked hummingbirds danced from one ruby-red flower to another; in front of me, the volcanic mountains of Morelos stared back, serene and austere. This is no countryside to swoon over, to ogle at, but a land in which to lose yourself with simple thoughts. Alfonso Reyes, I think, perfectly captured the emotions the region evoked in his essay "Vision of Anahuac."

"Our (Mexico's) nature is to be seen at its best in the Central Plateau region," Reyes wrote. "There, the spare and heraldic vegetation, the balanced composition of the landscape, the atmosphere so cleanly clear that colors are drowned in it—a loss made up for by the general harmony of the design—the transparent air, in which everything stands out in bold relief; and to sum it all up in the words of the modest, sensitive Fray Manuel de Navarette: A resplendent light, which makes the face of heaven bright."

Yes, the light.



THE MAJOR AND THE PAN AMERICAN GAMES

By Galen Winter

Yee known Major Nathaniel Peabody, USA (ret.) for about ten years—ever since I drew the short straw and was named by my law firm to administer his spendthrift trust. It has been an interesting time. I've learned the Major's priorities in life start with shotgunning and are followed by single malt scotch whiskey and quality cigars. I don't know which occupies the second place and which the third, but he only overindulges in the shotgunning.

A good case can be made that his fourth most desired activity in life is indulging in trickery and chicanery. I swear to the Almighty I will never again sit down at a poker table with him—but he always seems to have a way of arranging it.

I've resigned myself to paying for the Major's meals, drinks, and cigars at the end of the month, when he is, customarily, in a delicate financial condition. I'm sure my partners at Smythe, Hauser, Ingles and Tauchen, S.C. increased my equity ownership in the firm from seven to nine percent because they knew my management of the valued Peabody Trust represented a substantial personal expense to me.

But I have never, never broken the terms of the Trust by tendering the

Major's stipend prior to 12:01 of the first day of each month, when the Trust Agreement specifically requires such delivery. The trouble is, the Trust doesn't define where the checks should be delivered. (The Major insists they be wherever he happens to be. I've given first-of-the month

This was, indeed, a surprise. I'm sure the major's interest in rowing is limited to moving a duck boat in and out of a blind.

checks at locations from the Sonoran desert in Arizona to Winisk on the shores of Hudson's Bay and to Lord

knows how many other places where shotguns and dogs are allowed. And all because he was flat broke and without a way to pay for transportation back to civilization.)

I stopped lecturing him on the advisability of thrift and the advantages of establishing a nest egg. The last such attempt was an in-depth explanation of the Grasshopper and Ant fable. As I was finishing with "The Moral," the clock struck midnight, it became the first of the month, and the Major—silent and attentive until that time—took the check from the table, advised me that ants live in a communistic-type society, hence un-American and, hence, unworthy of being emulated.

Major Peabody has never displayed excitement for any proposition not somehow related to bird hunting. Oh, he will listen politely to other conversation about deer hunting or deep sea fishing and, for a few minutes, lead one to believe he has an actual interest in the subject. But his attention span is markedly limited, and he will soon excuse himself and look around for someone who owns a hunting dog or a double barrel.

His behavior at cocktail parties is noteworthy. It's rather sad to watch him feign interest in the small talk while he looks for a kindred spirit who would also prefer to be braving subzero temperatures in some wind-

Strange Traveling Companions

A hunter and his dog are heir to a long tradition of interspecies foraging

by Jared Diamond

It was another typical morning of birdwatching in the New Guinea jungle. My shirt was already soaked with sweat, but I preferred that discomfort to the alternative of going shirtless among the mosquitoes. I scraped a leech off my ankle and tried not to scratch the fiendishly itchy chigger bites on my thighs. With my right hand I waved a stick in front of my face to brush away spider webs, while occasionally running my left hand through my hair to remove spiders that the stick had missed. I wouldn't have minded all that chronic low-level discomfort if the birding had been good, but so far I had only heard a few rubbish species and seen nothing. The jungle seemed nearly lifeless. Once again, I began to wonder if I was losing my acuity as a birder, and if it was time after twenty-four years to leave New Guinea to other ornithologists.

A faint "ts-ts" in the distance caught my attention. I stopped to listen. Yes, definitely ts-ts; also a metallic trill. A shape darted in the treetops. Still more calls much closer now, motion straight ahead in the undergrowth. Twitter of a black berrypecker at fifteen feet, yellow-bellied flyeater pair just above, brown whistler calling, three pygmy honey eaters. Birds too numerous now to pause to take notes. Most of the birds are at ten to thirty feet, boat-billed flycatcher leading. Was that a shining cuckoo calling? Damn! I missed it. Fantail's descending whistle, female golden monarch hover-gleaning. Where is that bloody cuckoo? Fly-eaters joined by two juveniles, the monarch foraging above the other birds now. Yes, it is the cuckoo, first record here!-remember it for when I pause to write notes later.

See p.20

The jungle around me was alive with birds. For twenty minutes I followed their slow progress until they gradually pulled away, leaving the jungle as empty and silent as it had been before. No, I wasn't losing my acuity as a birder. Instead, most species of small insectivorous songbirds here foraged together in an itinerant group, so that one was either swamped by birds or saw none at all.

Such mixed-species flocks, as they are called, can be the bane or delight of jungle birding. While mixed flocks are not unknown among American and European songbirds (especially in the fall and winter), they reach their highest organization in tropical rain forests, where they may comprise dozens of species and more than a hundred individuals. Certain species act as flock leaders; others as followers. Banding studies have shown that tropical rain forest flocks are centered on a stable core of individuals: birds of different species that go about together from shortly after dawn until late in the afternoon, day after day, for years and probably for their entire adult lives.

But mixed-species flocking isn't confined to birds. Whether one calls the units flocks, herds, or schools, they are a wide-spread phenomenon in animal behavior. In fact, the most spectacular examples don't involve birds at all but are the mixed herds of large grazing mammals that roam the African plains. Those herds are rivaled in the sea by mixed schools of coral-reef fishes or by whales and porpoises. And the members of one flock need not be confined to a single vertebrate class. In numerous cases, birds follow mammals or, less often, the reverse.

Students of animal behavior have long been testing explanations for why animals sometimes forage individually, sometimes in large, conspecific groups (that is, ones whose members all belong to the same species). More recently, mixed-species flocks have also been attracting attention. Why do only certain species mix, often just at certain times and places? Do all flock members reap the same type of benefit or do different benefits accrue to different member species? For that matter, do all member species benefit or are there some members for whom flocking is neither beneficial nor harmful-and is it even disadvantageous to others? Earlier theorizing tended to search for "the single reason" that explained flocking in all cases. It now seems clear that the benefits of flocking are diverse. I'll explain what seem to me to be the five most frequent types of benefits.

The first type of benefit is exemplified by an eerie incident that occurred when I found myself the unwitting leader of a two-species "flock" in New Guinea's Foja Mountains. A helicopter had dropped me in this isolated range uninhabited by people. As I walked through the jungle, intent on birds and enjoying having a pristine wilderness entirely to myself, I became vaguely aware of a black shape somewhere behind me. I stopped, looked around, saw nothing, and walked on, slightly unnerved. Again I had a sense of a figure following me, quickly turned, and glimpsed a black creature vanishing behind a tree. I felt my heart pounding as I reflected that I had no radio to call for help and the helicopter wasn't due back for a week. I began talking to myself in





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order to calm down: "Take it easy, Jared, there are no people here. Why would anyone follow you? New Guinea doesn't have any known dangerous animals." Again a black shape flashed, and this time I spun around quickly enough to see it. It was a black, insect-eating bird called a drongo, following me in order to capture insects disturbed by my footsteps. Drongos in Asia and Africa are notori-

ous for following large mammals, such as elephants and giraffes, and feeding on the insects that fly up in their wake. In effect, the drongos use other animals as beaters, much as tiger-hunting maharajahs used human beaters. Monkeys foraging in the forest canopy produce a veritable rain of flushed insects and fruit, which attracts a cloud of followers, including not only drongos sallying after the insects but also antelopes and lizards eating fruit that falls to the ground and squirrels and hawks and hornbills chasing small prey disturbed in the canopy. Because New Guinea lacks large mammals, New Guinea drongos usually follow flocks of birds that rummage through the vegetation, as do monkeys. But in both New Guinea and Africa, drongos that can't find their usual beaters will settle for following people.

To North American bird watchers, the most familiar examples of flocking animals that use other species as beaters are cattle egrets and cowbirds, which can often be seen following cattle to eat the flushed insects. Originally, the cattle egret followed wild ungulates in Africa, and the cowbird followed bison on the Great Plains. With the arrival of American pioneers, these two bird species spread across the United States and came to employ cattle as beaters. American birders who have visited tropical Central and South America will also be familiar with the many antbirds and other bird species called professional army-ant followers because they regularly feed on insects flushed by army-ant swarms.

Just as desperate drongos follow people, and egrets and cowbirds follow livestock, so other birds have learned to use human technology as beaters. All of us have seen flocks of gulls hovering around tractors, but we may not have realized the benefit that tractors bring to gulls: disturbed or plowed-up earthworms, grasshoppers, lizards, mice, and other small animals on which the gulls can feed. Falcons follow trains to seize flushed birds, while seabirds follow ships for garbage and disturbed fish. Those seabirds in turn became leaders when World War I U-boat captains learned to find their targets by steering after the seabirds, which often proved to

be flying toward distant ships.



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'In the examples I've given so far, a follower species reaps benefits while a leader species neither gains nor loses; the follower merely acquires food items that the leader wouldn't eat anyway. From that division of roles, it's but a small step to the follower becoming a pirate and seizing food items that the leader would indeed have eaten. When following flocks of small insect-eating birds, drongos often assume the role of pirate, rather than just innocently using the small birds as beaters. But the most famous avian pirates are bald eagles and frigatebirds, which follow ospreys and terns, respectively, to seize fish that these birds capture.

There's another type of situation where flocking produces a loser as well as a winner. Snorkelers in tropical waters throughout the world are familiar with the solitary little fish called damselfish, which stake out a territory barely a few feet across on a coral reef. It's a comical sight for a snorkeler to be faced with a five-inch-long damselfish, bravely displaying and trying to look fearsome. A damselfish can drive off single individuals of much larger fish species, like parrotfish. But parrotfish traveling in schools swamp the poor damselfish's defenses and strip its territory bare of food in a few minutes. Simi-

larly, flocks of Australian honey eaters can overwhelm a single territorial bird and quickly drink all the nectar in its territory, although the territory owner could have driven off each marauder individually. Thus, the flock functions in these cases as a gang of muggers.

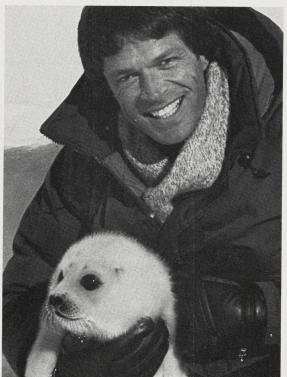
Why does a leader species tolerate follower species if they do the leader no good or even do harm? The answer can be as simple as that the leader is unable to shake the followers and thus has no choice. Nevertheless, the leader often does get a benefit: protection against predators provided by a follower species that acts as sentinel. In New Guinea, I noticed that drongos usually follow groups of noisy birds called babblers, whose calls back and forth to one another may attract goshawks. The babblers behave as if they are very concerned about hawks: they are furtive and dive into dense vine tangles whenever they get the chance. But the nearsighted babblers themselves are ill-equipped to detect hawks because they feed by gleaning small insects off the vegetation and keep their eyes glued on leaves a few inches in front of them. Instead, the farsighted drongo, which is constantly scanning for large flying insects dozens of feet away, is much more likely to spot a hawk. The drongo functions as a sentinel and gives loud alarm calls that benefit the babblers.

There's a similar division of labor going on in the spectacular photos one often sees of mixed herds of zebra, giraffe, wildebeest, and ostrich grazing together on African plains. The zebra is nearsighted but has acute hearing, while the other three species are farsighted. Together, these species can detect predators more successfully than any one of them could by itself.

Sentinels aren't the sole reason why flocking reduces the risk of predation. The larger the flock, the lower the risk for any particular individual that it will be the one that a predator attacks. Hence, in flocks of birds as well as in schools of fish, the individuals on the periphery, where the risk of attack is greatest, continually and selfishly try to push their way toward the center. In addition, the larger the flock, the harder it is for a predator to focus on any single individual and to make a kill at all. Human predators such as quail hunters have the same problem: paradoxically, it is easier to kill a single quail that flushes than to make a kill from a covey of twelve, because tracking any bird among twelve shapes crisscrossing in different directions is so confusing.

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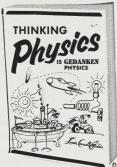
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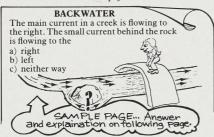
The Canadian Government has banned the commercial hunting of whitecoats. Seal Watch '89, organized at the request of the International Fund for Animal Welfare, will attempt to replace any lost income to the communities involved and will help ensure the hunt never starts again. IFAW is an independent, non-profit organization.

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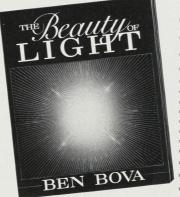
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flocking is to increase feeding efficiency. At first, one might have guessed the opposite: that many individuals together would interfere and compete with one another. In fact, flocking increases when food becomes scarcer and feeding efficiency is most at a premium (for example, toward the end of the winter for birds in the United States and Europe, toward the end of the dry season for tropical birds). Part of the explanation is that more eyes have a better chance of finding a good patch of food than does a single pair of eyes. The other reason is to coordinate the search for food. If many species are independently looking for similar food items and each species doesn't know where other species have recently foraged, one species may waste time foraging in an area that another species has recently swept clean.

As an analogy, consider five janitors who clean up a large hall after a convention, each of whom gets paid per pound of trash collected. Imagine that one janitor uses a broom, another a vacuum cleaner, another a pitchfork, another a rake, and another bare hands. Like the different species of insectivorous birds in a flock, each janitor is better adapted than the others to capture certain prey (here, trash) items, but there are some items that any of several janitors would be equipped to collect. A good strategy is for the five janitors to forage together through the hall, thereby constantly assuring themselves of trash-rich areas and avoiding areas with slim pickings (from having already been partly cleaned by other janitors).

When I began my career in ornithology in the early 1960s, there was some tendency among animal behaviorists to argue about what was the one dominant reason behind flocking (or herding or schooling). As we've seen, we now know that there isn't a universal answer. Flocking may be beneficial by providing beaters, chances for piracy, strength in numbers, protection against predators, or increased foraging efficiency. Different species may gain different benefits under different circumstances. But flocking also involves costs. Thus, any given species joins a flock when the sum of the benefits outweighs the sum

Here again, a human analogy may be helpful. Ask yourself, what impels a man and a woman to join in marriage? There isn't a universal answer. Instead, the hoped-for benefits of marriage include love, sex, money, companionship, and securing a coparent for having children. Marriage is also feared as involving costs, such as narrowed sexual opportunities, increased financial burdens, risk of abandonment, and someone else telling you

what to do. We marry when the benefits seem to outweigh the costs, and different people weigh the various pros and cons differently.

As a final thought, I'll suggest that mixed-species flocks aren't just a quaint thing animals do, but that our own participation in a mixed-species flock in the late Pleistocene was a significant step toward the rise of civilization. I'm thinking of the process by which we domesticated dogsa process that really involved dogs domesticating us as well. While the earliest identified bones of a domestic dog stem from about 12,000 years ago, bones of dogs at the first stages of domestication would have been indistinguishable from those of wolves, hence the process must have begun well before 12,000 years ago. Initially, wolves and humans would have been drawn to each other by at least three of the five advantages I've mentioned for other mixed-species flocks. Humans would have found wolves useful as sentinels against other predators; wolves would have pirated food at human campsites; and each species would have used the other as beater, with humans killing prey that wolves had brought to bay, and wolves killing wounded prey that had fled from human hunters.

Eventually, humans and wolves together became a hunting team far more effective than either species alone—as anyone who has hunted with dogs will appreciate. Dogs can sniff out hidden prey that we could never see, overtake fleeing prey that we could never catch, and bring prey to bay so that the hunter has time to catch up and make the kill. Just as one example, when I was in New Guinea's Karimui Basin in 1965, one dog with particular skill at cornering pigs was in the process of enabling Karimui hunters to decimate the basin's wild pig population.

So what was the significance of the greatly increased hunting success that dogs gave us? It meant the ability to feed more babies, hence increased human population, which contributed in turn to the pressure behind the development of agriculture, which was a prerequisite for the rise of urban civilization. The next time you take your dog for a walk, pause a moment to reflect with pride on the tradition to which you are heir. You and your dog constitute the most remarkable mixed-species flock in evolutionary history. Without it, our species might not have progressed to the point of building the Parthenon.

Jared Diamond teaches physiology at UCLA Medical School and studies birds in New Guinea.

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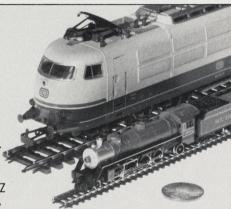
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Anatomy of an Epidemic

by Pascal James Imperato

AIDS: The Burdens of History is a collection of a dozen essays that carefully examine present social and cultural issues as they relate to AIDS (acquired immunodeficiency syndrome). They illuminate these issues by dealing with some aspects of the "burdens of history"—the inescapable significance of past events for present ones. These essays remind us that there are historical parallels for many of the issues now being debated, while at the same time noting the differences between then and now.

The editors, Elizabeth Fee and Daniel Fox, scholars known for their contributions to medical history, have assembled an impressive group of historians, public policy experts, and social scientists and in so doing have produced a provocative volume that is a pleasure to read. They take pains to note that the AIDS epidemic can tempt historians into facile analogies with past events and draw them into viewing the past from the perspective of our own time. Each of the contributors has struggled with these pitfalls in historical methodology and has been successful in avoiding them.

In the first essay, "Disease and Social Order in America: Perceptions and Expectations," Charles E. Rosenberg, of the University of Pennsylvania, concludes that biological mechanisms define and constrain social responses to disease. For example, if AIDS were spread as easily as the common cold, then society's response would be much more drastic. He also notes that the social response to AIDS is a vivid reminder that American society is fragmented, which in part explains the divergent views on key AIDS issues.

In one of the most provocative chapters, "Epidemics and History: Ecological Perspectives and Social Responses," Guenter B. Risse, of the University of California, San Francisco, carefully examines the historical responses of political and health organizations to epidemics. He describes in gripping detail three epidemics-bubonic plague in Rome in 1656, the New York City cholera epidemic of 1832, and the 1916 poliomyelitis epidemic in New York City. In all three epidemics, marginal groups, either ethnic minorities or the poor, were held responsible. In the 1656 bubonic plague epidemic in Rome, Neapolitan traders were at first blamed, then the poor, and finally the Jews. Almost two hundred years later, New Yorkers singled out Irish immigrants and the poor as the cause of the cholera epidemic of 1832. Not quite a century was to go by before Italian immigrants in Brooklyn were viewed as the cause of the polio epidemic of 1916. In all three epidemics, civil liberties were infringed on in the name of public welfare.

The 1916 polio epidemic witnessed the forced separation of parents and children, the publishing of the names and addresses of the sick in newspapers, the placarding

AIDS: THE BURDENS of HISTORY, edited by Elizabeth Fee and Daniel Fox. University of California Press, \$25.00 hardcover, \$11.95 paper; 340 pp., illus.

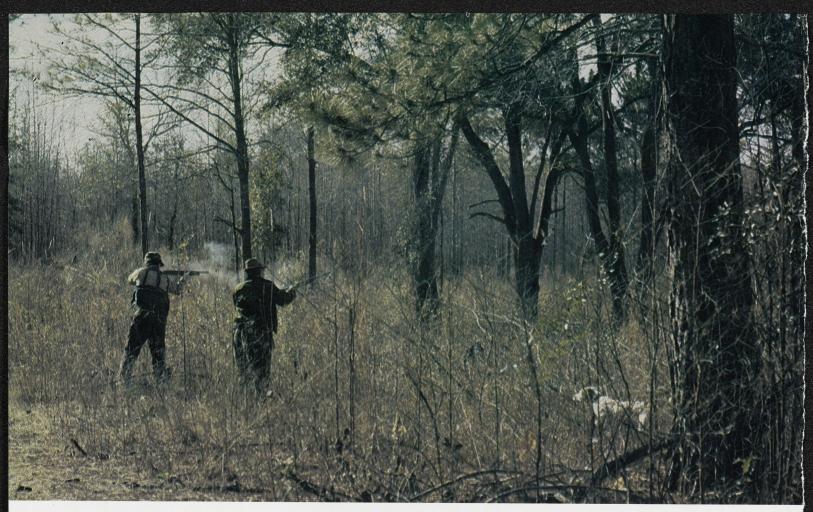
of houses, and the quarantining of family members of victims in their homes for two weeks. Polio victims, most of them children, were taken to isolation hospitals and their parents allowed to see them only once a month. Since the epidemic started in an area of Brooklyn with a high population of Italian immigrants, they were held responsible for it and stigmatized by both health officials and the press. New York City's commissioner of health, Dr. Haven Emerson, was unable to confirm the widely held impression that recent Italian immigrants had imported the disease, and U.S. consular officials in Italy reported an absence of the disease there. These facts had little effect on those who needed a scapegoat. By July, publicity about the

epidemic was at a peak and families with children found that towns on Long Island, where many city residents vacationed, refused them entry. Long Island hotel owners were fined for renting rooms to families with children, and in some towns entering children were held in quarantine. The New York City Department of Health and the U.S. Public Health Service then devised a traveler's identification card, certifying that a child did not come from an infected household and was free of symptoms.

My grandparents, who had emigrated from Italy to Brooklyn twenty-three years before, obtained these health certificates for eight of their nine children. The oldest, who was attending Cooper Union, remained behind to watch the house with my great-grandfather. My grandparents sought refuge on the farm of friends in New Hyde Park, just across the city's border on Long Island. This was a fortuitous choice because they were able to avoid passage through local townships that might have barred their way.

A Home Defense League of 21,000 people was formed by the Police Department to search out filth and violations of the sanitary code. Movie theaters were closed to children below sixteen years of age; grocery stores, street vendors, and fruit markets were closely watched; and streets were regularly washed down with water. By September the disease's incidence was on the wane and my family returned to Brooklyn for the start of school. In retrospect, the Draconian measures instituted by the Health Department had little affect on the course of the epidemic. However, they did, as Risse explains, generate public distress and panic.

In a related chapter, "Quarantine and the Problem of AIDS," David F. Musto, of the Yale School of Medicine, carefully examines quarantine in relation to cholera, leprosy, tuberculosis, yellow fever, and drug addiction. He convincingly



Bobwhites the Hard Way

by Charley Waterman

unting bobwhite quail the hard way is a lot of work for pretty small birds, but since duck hunters get up in the middle of the night, there may be a few quail shooters willing to take equally disagreeable actions.

Quail hunting is not supposed to be difficult. I have seen few paintings of bobwhites being pursued in rain or snow — or at dawn. If there is leisurely and refined sport,

bobwhite gunning is supposedly it.

Sometimes quail are expensive. A plantation owner was telling me that it would be very nice to get quail down to \$1,000 apiece in the bag — or rather on the shooting wagon. This made a pretty good story until I began to figure how much time, money, and effort I was expending per bird while hunting on public lands. I don't spend nearly as much as he does, but I don't get as many birds either.

This article is about hunting where quail are heavily pressured or where there are few coveys in the first place, or both. A dog or two finding a couple of coveys before lunch and a couple afterwards by just working good quail cover is not what we smugly call "normal" quail hunting.

This article is *not* about shooting hard-pressured quail down to the last bird. There are places where that can be done, but where they have a wide choice of cover, bobwhites become wild and crafty instead of dead. Here, I'm discussing quail that can take care of themselves better than I'd like.

One seldom-used but successful quail hunting method is what my wife yawningly calls "the dawn patrol." You get to quail country before daylight and listen for the morning calls. You need a watch and a compass. I have done this in three states and I am guessing that it will work in yours, with minor variations.

Quail often call in the evening and at sunrise, but I have found that the most reliable time during hunting season is 30 minutes before legal sunrise. This calling schedule has proved incredibly precise. Many times the quail have begun calling within a minute of the zero hour. Sometimes it doesn't last long and only a couple of calls may be heard from a large covey, but if I don't hear any at all I give up on that spot. My record on finding birds where there have been *no* calls is very nearly nil.

No one has explained the reason for this pre-dawn calling and biologists smile tolerantly when I bring it up. After a few minutes of whistling, things quiet down until daylight when there may or may not be more communi-

cation.

At this time they don't say *bob-white* often, and the kind of calls may vary, but you quickly learn to pick out the quail calls from those of other birds. A tape of quail calls might help you. I bought a good tape from Don Scott, 4709 East Quail Hollow, Lake Charles, LA, 70605.

The half-hour-before-sunrise serenade isn't a bobwhite monopoly. In quail country you can expect to hear from

as dangerous machines, with the power to kill. You know, we tend to take life as something immovable, something eternal. We think we're all going to live forever, especially if we're young. We are surrounded by the invincible shield of our robust youth.

But life is as fragile as a spider web. Death lies around every corner, waiting for us to forget him. He's a mean, sneaky predator who preys on the

careless.

How many times have I hunted with those whose muzzles swing across me? I can remember three times when fellow hunters, all good ones, accidentally torched off rounds behind me that, had the hunters not been careful with where the muzzle pointed, would have ended me. One was a son of mine, a gun safety course graduate.

Once, I sprayed a fellow hunter with shot when a quail jumped between us. I never saw him. Another time, I nearly fired at a fellow hunter when a quail got up between us because he was dressed in hunter brown, and blended into the dead-grass background. That time I could have made an excuse that he was careless because of the way he was dressed. It would have been of great consolation to his widow, I'm sure.

There simply is no excuse for not learning and practicing gun safety. I abhor these pickup jockeys who have a rack full of guns, often loaded. I think any state which doesn't have a strong cased-gun law is stupidly irresponsible, and that includes my home, Missouri. Uncased guns and especially loaded ones, have no place inside a vehicle.

While I don't support mandatory gun safety training, I do agree with a powerful program that encourages all hunters to take the training. The Jaycees, the conservation departments, the National Rifle Association, other agencies all offer such programs and any father who does not enroll his children in it is, in my book, not fully doing his job as a parent.

Hunting is a relatively safe sport. Nearly all gun accidents during hunting are preventable. Again, using Missouri's statistics, there has been a steady decline in the number of hunting fatalities since the 1960s,



Any father who does not enroll his children in hunter ethics and gun safety programs is not doing his job as a parent.

Photo by the author

despite a huge increase in the number of hunters, especially of deer and turkeys. In the 1960s, there were an average of a dozen fatalities a year. In the 1970s, the number dropped to just over nine, and thus far in the 1980s, the average is just over seven.

I suspect the emphasis on gun safety training is partly responsible. A hunting generation has been exposed to the training. Emphasis on hunter orange (it's mandatory for deer hunters) also has helped.

There is no excuse for shooting another hunter by mistaking him for game. No one should shoot unless he is sure of the target. Self-inflicted wounds, a second major cause of hunting accidents, are nearly all caused by carelessness.

Careless accidents can be prevented. Somehow the public perception of hunting, especially with single-projectile guns, is of the stray bullet wandering for miles on a lethal course. "By God, I won't go in the woods during deer season!" I hear it proclaimed as if the woods were filled with flying lead.

Yet almost no accident happens that way. The odds of a tiny piece of lead somehow finding a vital spot, itself tiny, by accident, in a universe, are astronomical. Certainly it can happen. It did to Donna Kullman. The stray bullet, the mad-dog projectile felling the innocent victim.

It is the responsible gun owner's nightmare, but it is far more the nightmare of a parent. It happens that I work with Donna's father — he is a forester for the Missouri Conservation Department. I know his anguish, yet I can't know it, for my daughter is alive and well.

I can only imagine, with horror, how I would feel if one of my children were so senselessly claimed

And I can only pray that every parent of every child born and yet unborn will take a vow and then follow through on it to seek out a gun safety course and make sure his child completes it.

I don't think any adult hunter, no matter his years of experience, is immune from carelessness either, and if nothing else, a dose of gun safety training will reinforce his good habits, perhaps purge him of a bad one.

You can't comprehend the shock and grief that a gun accident causes by reading about it in the newspaper. That happens to someone else. A shame, but let's turn to the sports page and see what the Cardinals did last night . . .

Donna was real. I knew Donna. She wasn't just someone in a newspaper story, she was someone I knew

And the finality of that is dreadful.

Joel M. Vance is the author of Upland Bird Hunting, which is available from the GUN DOG Bookshelf. If you prefer an autographed copy, it can be obtained for \$19.45 by writing directly to Mr. Vance at 525 Aurora Street, Jefferson City, MO 65101.

a variety of birds at that time, and I often hear sounds I don't recognize. Between this brief sounding-off and daylight, things may fall almost dead quiet. Most attempts at explaining the early call begin to peter out when you ask about the quiet period that follows.

You need a compass to take bearings on birds that may be half a mile away in semi-darkness. Even if you're fairly familiar with the area, you sure can miss birds without it — and you *may* hear several coveys from several

directions, sometimes more than you dreamed lived in the

area.

I generally listen from near the truck, containing a couple of dogs, so I need to get far enough away that dog movement won't block out very faint calls from a great distance. Plot the call directions as well as you can. At best, you'll make mistakes. I have heard of dogs that picked up quail calls and remembered their directions. Mine never have been much good at that.

This technique is mainly for country that supports only scattered coveys. And if you think it's a waste of time and that your dogs will find them anyway, just try to cover an area with a half-mile radius without missing *anything*. There is more ground than you think, especially if much

of it is brushy.

Such a tactic is most important when the country lacks outstanding features and distinct cover edges. It has worked best for me in a Florida national forest where the birds were widely scattered and where one area looks much like another. Edges of grainfields and other obvious cover sectors minimize the value of pre-dawn locating, although it still works. Using pre-dawn scouting, I have repeatedly found birds where I had drawn a blank in ordinary operations.

Between that calling period and daylight, the birds seldom move much; they may stay put for a long while after the sun comes up. You can leave and come back later in the day if you like, but I generally wait until good light and then start hunting. When there's heavy dew, I've

occasionally worn hip boots.

Remember — the birds haven't moved much since the night before and you'll need to get a dog close to them if he's to pick up scent — a hard task that makes for poor early-morning hunting in many cases. When you think you *know* where the birds are, you'll be surprised how much steering a good dog needs if scenting conditions are shabby. I have occasionally pondered how many birds that clown has passed when I had no advance information.

No reason to get eloquent about quail running more, staying closer to heavy cover, and being spookier than in the good old days. Sure it's true, a result of natural selection and maybe what I call "short-term evolution" (biologists don't like that term). But find some that haven't been hunted, and you may get right back to those

good old days.

Silence makes wild quail a little more vulnerable. Most quail chasers have watched coveys go up from 200 yards away when the dog box door slammed, and every year thousands of quail start sprinting for heavy cover with the first sounds of loud conversation. This brings up the business of dog bells.

Wild quail are now hunted in thick brush where few shooters ventured a few years back. I don't know how it can be done without a bell unless the dog stays too close to the gun, but if you're running dogs along a feeding edge where quail leave the very dense stuff just long enough to fill their crops before ducking back home, you'd better unsnap the bell or they'll get fiddlefooted — unless the dog bears down on them like the milltails of hell.

I've hunted quite a few "swamp quail," and although fables say they're a different species, it's simply a matter of birds that figure walking and wading are safer than flying. There are some southern swamps where you might as well forget it. I know about brush hunting, but if you can't get off your stomach and can't move your shotgun, you may have followed them too far. I've actually seen a pretty good old dog give up in brush; he had to be carried out.

Most quail feed in "shootable" areas. Some impenetrable stuff is bordered by weeds, grasses, or grains that provide meals, so the birds live on the edge of heavy stuff and go out to feed. We tend to think of feeding as a rather long process, but in proper conditions with hunters on the prowl, a covey can walk out, fill up, and get back in the rough in 15 minutes or less. Late afternoon is the most reliable time to look.

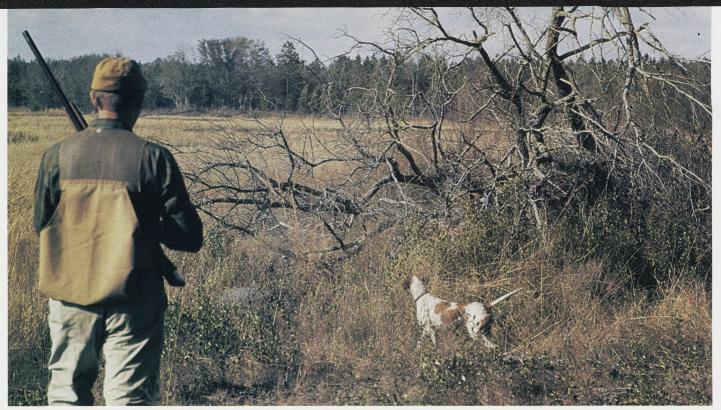
The dog finds them only a few yards from the edge, and generally it's best to walk in from the open side as beady-eyed rockets coming at your head are disconcerting. However, if you think they're so close they'll run instead of fly, you might try to cut them off and actually shoot as they swerve through the rough stuff. Regardless of the outcome, they're back in there and generally scattered.

Along toward dusk they want to reassemble, generally working back toward the familiar edge and frequently calling. Anyway, that's a good time to find singles or little groups — right where you got into them to begin with.

Wild quail are now hunted in thick brush where few shooters ventured a few years back.

Photos by the author.





While quail hide in the really thick stuff, most feed in "shootable" areas. Late afternoon is the most reliable time to take your dog for a closer look.



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VISA MasterCard This can be deadly, and some game managers consider it poor sportsmanship if there are *plenty* of birds to be found more conventionally. In other cases, when you're hunting low population areas anyway, it's just good strategy. It is seldom that such coveys are destroyed. In April I have gone to a big thicket area where hunters had claimed the place was shot out and found those "swamp quail" clear back in and evidently making a living without ever touching their conventional feeding areas. I have to conclude they *stayed* in the thick and sticky during the latter part of the open season.

It's up to you just how far you and your dog want to go into the brush. One of the more successful brushpatchers I know takes a Lab and a Model 12 Winchester riot gun when he wades the weeds, using an ounce and a quarter of number eights. If this sounds like taking advantage of Gentleman Bob, go in there and see how many birds you come out with. They fly up your shirt front, but they also circle your ears and decisions are made rather suddenly. I haven't used a flush dog except briefly, but I have followed pointing dogs and bells into such places (cactus in Texas and palmettos in Florida) and have always left a few for seed (a wry attempt at humor here.)

Almost invariably, these heavy brush quail have been driven there from somewhere else. Travel is too slow for much success at finding new coveys in brush. Now, this final cover is much worse than typical ruffed grouse or woodcock popples or alders, but your original chance was probably in more open country where the ruff or the timberdoodle wouldn't have been. I am trying to say that it all evens out.

Veteran quail hunters I've known have been deadly marksmen and superb pointing-dog handlers, but often lousy naturalists. Most of them neglect the birds in off season and at odd times of day. Their off-season study generally consists of listening to a few cock birds and noticing a brood of "walnuts" crossing a road. Of course there are exceptions, many game managers and plantation operators working at it all year. Most gunners, though, see some good cover and leave it up to the dogs.

If there are plenty of birds, the idea is to give them a little time in the morning to put out scent before getting after them — a program that may not work on a rainy day. Work the sunny areas in cold weather. These are fairly common rules, but quail hunters, however wise in the ways of dogs and "normal" birds, tend to be a little set in their ways. One spectacular example: the little weed patch at the edge of town.

It was a small town and there were plenty of quail hunters there in those days, most of them using high, 4-wheel-drive "bubba" trucks with pointers. The hunters rode instead of walking. The little weed patch wasn't posted and of vague ownership, I guess — unfenced and about 300 yards long. On the way out or on the way in, the town's hunters often stopped to give it a try — often enough that there was a hard-packed trail around it. They never walked it, simply driving the perimeter and letting the dogs check the center and the edges. It took only 20 minutes or so.

My friend, a professional forester and amateur naturalist who had shot quail for 30 years, mentioned that it was a good place for birds and that since I often took a dog out in the evening, it was a prime target.

"Should be about three coveys there," he said, "but they don't come out of the brush until the regular hunters are home having a drink and waiting for supper."

Oh well, it was a chance to exercise the dog, even if the trucks were noisy on the nearby highway and a chicken hatchery gave me sounds and smells from a little way off. Less trouble than really going hunting.

The dog was a Brittany, one of the first of the leggy ones, often taken for a setter who had lost his tail. I parked my truck and began to stroll along the little field's edge, sniffing the hatchery and noting the beer cans, old auto bodies, and abandoned washing machines. The dog pointed at the edge of an impenetrable swamp and I walked up to see what he had. I guess I wasn't ready to shoot. The quail came out of there and buzzed at the brush. I missed the first one and then caught one that had decided to slow down to alight and start walking once he got inside. I showed him! Everything was quiet except for the cackling chickens at the hatchery, the roaring trucks on the highway, and the panting dog looking for my bird.

We went on for a hundred yards and a covey flushed wild. I know now that they'd just come out and probably hadn't started feeding yet because they went in a compact wad, too far ahead and too quick. Then came the third covey, one of which I spilled into the brush after the dog held them. Elapsed time: maybe 20 minutes. I doubt if anyone had shot at them all year.

This is edge hunting at its most spectacular, but I had only two birds — enough to make a successful hunt the hard way.

It was on an edge of brush bordering a field of broom sedge that I missed the same quail four times on one flush with a double gun. I consider this exceptional, and I don't know if it's been done by anyone else.

The covey was big, about 15 yards in from the edge. The dog did a slick job. Everything worked out and I walked right into the middle of the bunch. While they went up all around me, trying to stare me down, I thoughtfully pushed off the safety and looked for the easiest shot — a time-consuming failing of mine. One of them, a late-

rising shiny cock bird, was confused and headed right out into the middle of the open field instead of going into the cover. I missed him by shooting too quickly and then missed with the second barrel by shooting too carefully at too long a range.

This is not unusual for me, but as I broke the gun, I saw the bird had changed his mind and had decided to go into the brush with his friends. He made a tight U-turn and charged me. I stuffed two shells into the gun, missed him coming in, and gave him another one right in the same place, as they say, as he entered the swamp. I stared at the moving branches where he had gone and contemplated the use of poisoned corn. Shooting birds on a rough edge requires a little mental preparation.

Late season hunting is tough hunting. On public lands and hard-hunted private spots, however, the pressure fades fast after the first couple of weekends. In southeastern Kansas, I had a small game management area all to myself and quickly found three bunches of birds just strolling around the food plots. It was only a short time to dark, and, when I stopped at a filling station, the operator wasn't surprised that no one was hunting.

"After the first two or three weeks," he said, "you don't find many quail hunters around here. Just a few people out trying to train young dogs."

I had the management area to myself again the next day too, but this time the birds roared off into some brushy strip-mining leftovers, and I couldn't find but a couple back

there.

There were still plenty of quail, but they'd changed their operations. You would have had to change yours too.

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TRAINING Q&A by Dave Duffey



QUESTION: Do you think the more quail you kill over a dog, the better bird dog you will have — up to a certain point? I guess my real question is: Do bird dogs hunt to find and point birds or to retrieve birds? The reason for the question is I have a three-year-old female and a one-year-old male Pointer. They hunt hard. However, I can't hit very good. Since I don't kill many birds, will they lose interest? (Tennessee)

ANSWER: I just wish some other hunters who can't shoot for sour apples would 'fess up and consider the possibility that poor shooting might be a factor in some of the problems they have with their gun dogs. I have long contended that killing birds is what really makes a bird dog. In fact, the more the better. A bird in the mouth is a reward for the dog. In major field trials, blanks are discharged when birds are flushed and no retrieving is required. So, trainers of field trial dogs have been known to shoot a few birds in training or to hunt with their champions to keep up intensity and interest.

However, don't worry. You don't have to kill every bird you shoot at to keep a dog keen. As long as they are finding birds (after they've had a few to retrieve), most dogs seem to be pretty optimistic about the shooting ability of us humans. They take muffed shots in stride. Like people, they remember the good and forget the bad. I guess if you break it down, you'd have to say that dogs hunt in order to find and point birds. Pups and young dogs that have never had a bird shot over them do this. It is bred into them, just as foxhounds

will drive foxes out of sheer instinct and are seldom rewarded by catching their quarry. The retrieving and the praise given for recovering the bird is essentially a reward. But, like a bonus or a raise in pay, it is supposed to stimulate better performance and, with dogs, you can count on that happening.

QUESTION: Three questions. I am pleased with my Chesapeake who, at three years of age, has become an allaround good companion and hunting dog. But, as the dog nears the bird on a retrieve, slightly crippled mallards will dive under water and swim 40 to 50 feet away and partially surface. Usually, this is in the weeds and the dog quickly looses the bird. It is very frustrating to watch the bird slip away either underwater or just at the surface. What can I do (besides shooting better) to help my dog track down those birds? He is not trained to take directional signals.

Second, occasionally my dog doesn't deliver to hand. He stops outside the blind to shake-off and leaves the bird there. The only solution I've read for this problem is to run backwards encouraging the dog to follow. This concept works well on land but is impossible in a blind. What can you suggest?

Third, when I place the dog in a sitting position and ask him to hold a bird in his mouth (like posing for a photo), he occasionally refuses to hold the bird. I have not forced him to hold the bird because, like most Chesapeakes, he can be stubborn. I would like him to do this, but am afraid forcing the issue would cause

harm. How should I handle this? (Illinois)

ANSWER: Let's go at this from the bottom up. Go ahead and force the issue. Once you've taught your Ches to hold on command, you also will have solved your second problem. As he comes out of the water and until he does deliver to hand, command him to "Hold it!" If you've drilled him enough, he'll hang on until you tell him to "Drop!" or "Give!" Teaching a dog to hold until told to release is not particularly tedious or difficult and is about the only force procedure I heartily recommend for an amateur trainer.

Regarding the failure to recover swimming and diving cripples: First, let me say that recovery by a dog of a lightly hit diver duck (bluebill, redhead, canvasback, etc.) in open water is rarely accomplished by even the best of dogs. A really top retriever can collect most of the puddle ducks knocked down because they will take refuge in vegetation, rather than head for the middle of a large body of water. There is more scent and very often the dog can lunge through muck and shallow water, catch up to or corner a cripple rather than engage in a losing race with a strongswimming duck. Desire, diligence, sagacity, and a good nose make this possible. Really sharp dogs catch on quickly. Others need considerable experience. And a few just never master the sneak-off recovery game.

To give any dog the right idea or practice, start by releasing a wingclipped game farm mallard in a small patch of dry or marshy cover where the dog can trail, run, lunge,



At left, Trueblood's dog Queenie pointed a pair of Valley quail. The straightaway, shown in the photo, ended up in the game bag, but the other turned hard to port and escaped before the author could swing on it. Below are the female of the species (at left) and the male Valley quail



THE QUAIL THAT SAVED OUR HUNTING

BY TED TRUEBLOOD

he birds of today are much more wild than those of former years. . . ." That's what Dwight W. Huntington wrote about the California valley quail in *Our Feathered Game*, and no quail hunter over forty would disagree with him. All hunters over forty think *all* game birds are "more wild than those of former years." They always did. The book was published in 1903.

Huntington didn't say anything good about the valley quail. He didn't like them because they run. All Western quail run; bobwhites run, too, when they have no cover in which to hide. And the Western quail often have no cover. But Huntington said, "As a gamebird, the valley quail is in no way to be compared to the quail of the Eastern states." I think he was out of his tree.

Whether a gamebird—any gamebird—runs, flushes wild, or holds for a point depends mostly on the cover. Even pheasants will stick tight in a tangle of wild roses or blackberries where neither you nor your dog can get near them. I have had coveys of valley quail run away from me on barren ground, always in sight and gaining every step, and that was back in the days when I could run as though a bull were after me, even when he wasn't. And I've seen valley quail that were glued to the ground.

One morning Willard Cravens, Peter Barrett, and I, assisted by Rip and Queenie, flushed a (Please turn the page)

PHOTOS BY THE AUTHOR

our family business there's three things you don't mind spending your money on. Copper tubing. Fast cars. And a fine pair of warm, dry boots. And that third one is just as important as the first two. When you're crouching down in some gully with your feet in ice-cold ditch water, never moving a muscle for hours, whilst them

damn Treasury agents snoop around with their dogs barking and sniffing, well, that's the time you're glad you didn't cut corners on your boots. These boots we bought are fine boots, well made, need no breaking in. But to us, that don't mean so much compared to the way they're waterproof and warm.



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covey of valley quail from a weedy fence row on Cliff McMahan's place. Cattle were everywhere and we didn't shoot. The quail flew out of the pasture and settled in a wide draw outside the fence. Since it was above the highest irrigation ditch, it had never been cultivated. The cover was sparse grass and native shrubs—shad scale, rabbit brush, greasewood, and sagebrush, rather widely scattered.

We didn't see the quail light, but there were fifty or sixty of them and when they went out of sight around the first bend they were well strung out. It would take them a while to get together and run on up the draw, which came down at an easy grade from the big flat at its head. We hurried after them, keeping the dogs at heel until we, too, rounded the first bend. Here we let the dogs start hunting; quail could be anywhere.

THE MORNING, years before, when Rip and Queenie met, he made an improper advance and she bit him. She told him off, too. It was funny. He was a big, black-and-white pointer and she was a little, white-and-orange Brittany, but she put the cougar sign on him and from that day on they refused to acknowledge each other.

Willard and I hunted them together hundreds of times and I never saw them running side by side nor one behind the other. We were fortunate; two dogs doing that don't find any more birds than one would. So here Queenie swung out to the left past Willard and Rip swung out to the right past me and in about 30 seconds both of them were rigidly pointing.

Earlier, when we left the car, I had done a foolish thing. I had said, "Two guns are enough. I'll just carry my camera and take some pictures."

Now I realized I had been out of my mind, but there was nothing to do but to stand back with my frustrating camera and let Pete flush Rip's quail. He killed it, too, and Rip brought it to me—though there really was small comfort in that. When Willard kicked the greasewood Queenie was pointing, two quail buzzed out and he got them both.

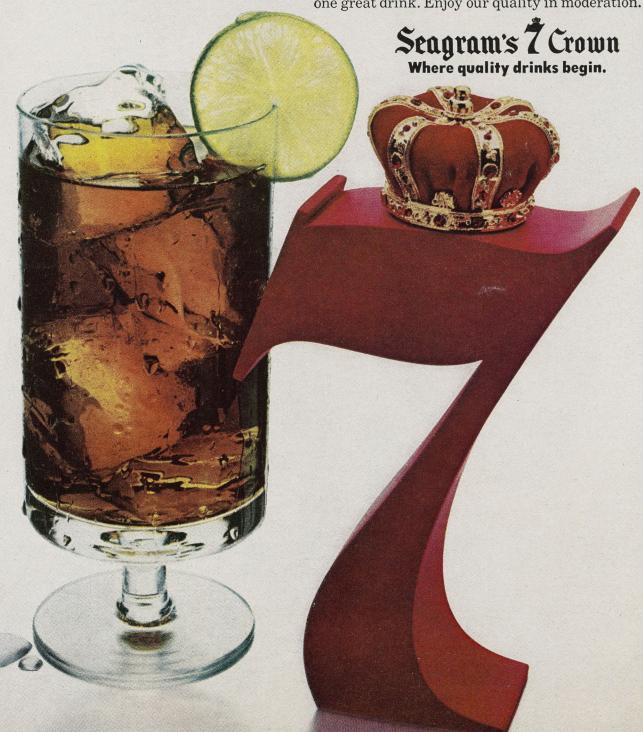
We walked on up the draw a little way, the dogs hunting the bottom and 25 yards or so up each side, and soon one of them pointed. Or maybe they both pointed. Things got pretty confusing along about then. That little valley was stiff with quail and they wouldn't move until you kicked the bush a dog was pointing and then one or two would boil out.

Before long Willard had his ten birds and Pete was getting close to his limit, too. Willard, my true friend, could see the agony I was suffering. He handed me his gun and a handful of shells. The dogs were still moving from point to point with time out only to retrieve.

I killed six quail straight with

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Willard's gun. Willard had missed a few—not many, but a few—and so when Queenie retrieved my sixth bird I said, "My, I don't see how anybody could miss with such a nice gun!"

It was just about the worst thing I ever said. As remarks go, it was a lulu. It fixed my wagon. From that instant on I couldn't have hit the side of a barn if I was locked in it. I shot up all of Willard's shells and maybe scratched down a bird or two and I finally had to walk back to the car for more ammunition and my own gun to finish my limit. When valley quail want to stick tight, there's no other bird that can stick tighter.

I think it is our fastest upland

bird. Maybe the bobwhite is as fast —I don't want to argue—and they're both handsome. But there is another point to consider in evaluating a gamebird besides how well it holds for a dog and how fast it flies. That is whether it can survive under to-day's conditions.

The bobwhite was brought to Idaho in the 1870's. It did very well on the irrigated farms of the Boise Valley, and by the time I began hunting in the 1920's my brother and I could find six or eight coveys on a Saturday morning hunt around our father's farm.

In those days we farmed with horses, and the principal crops were corn, wheat and barley, potatoes, and alfalfa. There were brushy corners, weedy fence rows and ditch banks, and patches of rough land that had not yet been put into cultivation. Herbicides were unknown and clean farming would have been impossible even if anybody had wanted to try it.

Now farming is completely mechanized and fall plowing from road to road is the usual practice. Add concrete irrigation ditches, weed burners, and herbicides, and the result is that thousands of acres are totally devoid of food and cover from October until May. On top of all that, we have had a pestilence of houses. Big-eyed houses now glare at me where I once flew quail. There are few bobwhites left.

ABOUT ten years after Bob hit the skids, valley quail moved in. They were not introduced in the immediate neighborhood, but about 30 miles away, and they spread like gossip. And right there is one way in which valley quail are better suited for survival in this subdivided world. Destroy a bobwhite cover and that covey is doomed; valley quail just move on until they find another home. Or when some fool shoots out a covey, Bob may be gone forever. The wandering tendency of valley quail makes it likely that a new covey will be in that cover by the next hunting season.

I live in a town of 20,000 souls and a few people. One fall evening at dusk I went out to feed the dogs and on the way to their run I heard the wh-wh-whew of a quail. Seconds later, it was repeated from another direction. I stopped with a pan of dog food in each hand and was amazed to see valley quail everywhere—on the ridge of my roof, on the neighbor's roofs, on TV antennae, and in trees and bushes. There must have been thirty. Those quail were traveling; they left the area at daylight.

Even when they were most abundant, bobwhites never strayed more than a few hundred yards from the cultivated fields. Valley quail are much more adaptable. You may find them in wheat stubble or a harvested cornfield or you may find them out in the desert 40 miles from the nearest farm. All they require is cover that would scarcely hide a mouse, a little water, weed seeds for food, and shrubs in which to sleep. Their habit of roosting off the ground probably makes them less vulnerable than bobwhites to ground predators, but perhaps more vulnerable to severe winter weather.

Excluding the Gambel's, there are three quail in the genus *Lophortyx*: The California quail of the humid coastal belt from central California north into Oregon; the valley quail that inhabits the arid inland valleys and foothills from Southern California to southern Oregon, and the Catalina Island quail. The first two are pretty well scrambled now as the result of stocking, but those that have been so successful in the (Continued on page 84)

FIELD & STREAM SEPTEMBER 1979

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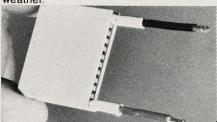
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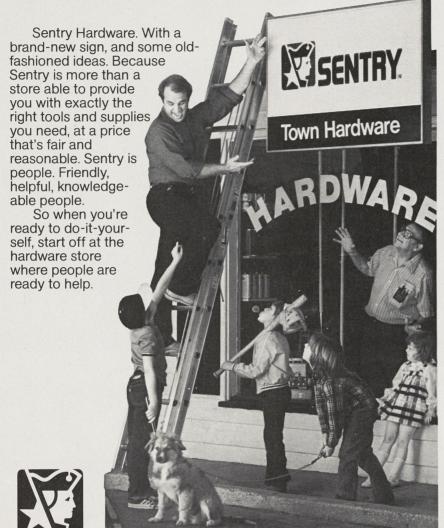
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The quail that saved our hunting

(Continued from page 16)

dry country of eastern Oregon and southwestern Idaho must have been predominantly of the valley strain.

Valley quail average about an ounce smaller than bobwhites. I weighed ten of the former that came to exactly 60 ounces; ten bobwhites weighed 73. They were all mature birds in good condition.

Both cock and hen valley quail have ridiculous little topknots that tip forward and are shaped like half a crescent moon with the point at the bottom. The male's is black; the female's, smaller and gray. The male has a black bib edged with white and a white band extends across his forehead and back along the sides of his head. Both sexes have darkedged breast feathers. While the hen's plumage is more subdued, both birds appear dusty blue in flight.

They are good parents and rear broods that are hard to believe. I can't imagine how a setting quail can possibly incubate the fifteen or six-

teen eggs she lays, but obviously she does. I've seen so many chicks, not much bigger than bumble bees, running after their mother that I couldn't count them. And the whole brood seemed to flow along the ground like an army of bugs. During the fall several broods may join forces—they're sociable little birds so that coveys of fifty, seventy-five, or a hundred quail are not unusual. It's good then, after you're through hunting, to sit quietly and listen to them going to bed. They have a lot to say, all sort of sleepy and subdued and confidential.

One of the qualities that makes the ruffed grouse so great is its unpredictability. You never know what a grouse is going to do until he's done it—and then it's usually too late. The valley quail went to the same school. Of course, the quail is a covey bird, so when ten, or twenty, or forty take to the air one or two are likely to make a mistake. They're the ones we get.

ONCE Willard and I marked down a covey of valley quail in a patch of big sagebrush about the size of a city block. Now, big sagebrush is the proper common name for Artemisia tridentata, even though it may be only knee high. But this was big big sagebrush; it was as high as my head. Underneath, the ground was bare and the quail could run around like marbles in a pinball game.

Rip and Queenie got into the big sagebrush and we got into it and things began to happen. There were some open spots in the brush, and I hurried from one to another in hopes of getting a shot. The dogs raced back and forth; no dog could have pointed a quail here. There was no grass and no weeds. All the dogs could do was to make them fly and, believe me, Rip and Queenie put their hearts into it. And quail flew. Oh! they did fly. I heard them. I counted twelve quail that I heard but couldn't see before one foolishly came up above the brush and gave me a shot. Those quail knew they were safe when they were flying through the brush, no matter how difficult. The foolish one that rose above the sage to easy flying simply made a mistake. It was the one I

Whether a grouse flies away behind a tree intentionally or merely by accident has been the subject of many an argument. I won't get into that, but I'll tell you this: If you are out in the middle of a big, barren flat and there is one greasewood 4 feet high within range and you flush a single valley quail, it will fly away behind that bush.

Valley quail have been introduced successfully all up through the arid country of Nevada, southwestern Idaho, eastern Oregon and Washington, and on into British Columbia. They get along in farming country where the bobwhite gave up and they thrive far out on the desert. I think they are one of our greatest gamebirds.

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Of all American quail, the mountain quail is the largest. Big ones weigh as much as 9½ or 10 ounces in their prime

MOUNTAIN QUAIL

BY TED TRUEBLOOD

t has been nine years since I shot a mountain quail. I may never shoot another. Yet it is, perhaps, my favorite of all our grand upland gamebirds, and my last day with mountain quail is easy to remember.

Willard Cravens let me out at the lower end of a grass-and-sagebrush basin that was about 3 miles wide. The sides sloped up steeply for, I suppose, 1,000 feet. He would drive 2 miles farther and 200 or 300 feet higher and would hunt around the sidehill. I'd hunt the creek bottom and eventually we'd meet in a good chukar area in the northwest corner of the basin.

In Idaho, "creek" is a very flexi-

This is the noblest upland gamebird of them all

ble word. Kelly Creek, a quality trout stream, is so wide, deep, swift, and rough that Paul Bunyan couldn't wade it. But the creek I intended to follow flowed only after a sudden thaw or a violent rain. All the rest of the year it was dry, save for a few widely separated pools where an

occasional rain filled little basins in the bedrock. Chukars and quail drank from them.

There were no trees; not even a willow. The cover was cheat grass and sagebrush. Along the bottom it was fairly thick; the slopes were bare except for scattered bushes and sparse grass. There were a few huge rhyolite boulders that, in ages past, had tumbled down from the rimrock above.

My little Brittany, Nip, was 18 months old. She felt so good she couldn't keep her feet on the ground. She had been coming along well, but the birds we were most likely to find here, chukars or valley quail, can give an old dog trouble—and you're

and the National Wildlife Refuge Association, all of which are sympathetic to hunters. In addition, Trout Unlimited, the Federation of Fly Fishermen, and the National Audubon Society were for Udall-Anderson, along with several important labor organizations . . . and Cleveland Amory's Fund for Animals.

Ironically, Amory's press release announcing support of the Udall-Anderson bill called it a "badly crippled" measure which will allow "the animals on over 90 percent of the lands set aside . . . [to] be subject to slaughter by hunters and trappers." Although sportsmen might reasonably have interpreted Amory's complaint as indicating their hunting and fishing interests were largely protected under the Udall-Anderson plan, many hunters simply assumed that if Amory was for anything, it must be bad. Thus, they fulfilled Amory's stereotype of the bigoted sportsman, and they mimicked his own bigoted assumptions about hunting.

The competitive measure offered by Representatives John Breaux and Jerry Huckaby of Louisiana and John Dingell of Michigan was supported not only by the NRA and several state affiliates of the National Wildlife Federation, but by the U.S. Chamber of Commerce, Alaska's association of commercial hunting guides, and the mining, oil, gas, and timber industries, among others. As noted previously, some of the supporters of this bill (or opposers of the Udall-Anderson bill) made it seem as though the very future of hunting hung on this issue.

But what in fact were the real differences between the two bills? How much did sportsmen actually stand to gain or lose? And why, ultimately, did the House of Representatives overwhelmingly endorse the Udall-Anderson version?

First, despite charges that the President and Udall planned "to lock up Alaska," both the Udall-Anderson and Breaux-Dingell-Huckaby bills guaranteed access to traditional hunting and fishing areas, via traditional means, including power boats and aircraft.

SECOND, while both proposals endorsed state management of fish and wildlife resources, the Udall-Anderson bill provided that subsistence hunting and fishing claims be monitored by the Interior Department, while the Breaux-Dingell-Huckaby bill would have taken such disputes to federal courts. Some Western representatives voted for Udall-Anderson, possibly because they are weary of unworkable decisions made by the federal courts regarding Indian treaty and subsistence claims.

Of course, a perfect Alaska lands bill would have included no federal override whatsoever on the question of subsistence rights, and fish and wildlife resources would have been managed as they should be, by the state and for the benefit and perpetuation of the resources. (Next month

we will take a closer look at the crucial issue of the state's right to manage fish and game, and the question of subsistence hunting.)

Third, while both Udall-Anderson and Breaux-Dingell-Huckaby left the vast majority of federal lands open to hunting and trapping, out of a total of 227 million acres, the final Breaux-Dingell-Huckaby bill would have included only about 3 million more acres for such activities. However, this increase was offset by the fact that Breaux-Dingell-Huckaby would have left the non-wilderness portions of all National Wildlife Refuges (nearly 50 million acres) open to hard-rock mining. On the other hand, the Udall-Anderson version protects such lands, plus 37.4 million more acres, from hard-rock development, which anyone who has seen some of the grim corners of Appalachia or strip-mined areas of the West will recognize as devastating to fish and wildlife and wild land. As for oil and gas exploration and development, both bills permitted such activities on non-wilderness portions of the refuges.

In the eleventh hour, there was such a mad scramble in the House for new positions that a neutral observer could not have told who was for what or for how long. Only Alaskan natives made out well when their lobbyists told each Congressional clique: "Support our amendments, and we'll support your bill." Although only one bill could win, with such a comprehensive game plan, there is no way Alaskan natives could lose.

Two of the state's most important big-game regions—Gates of the Arctic in the Brooks Range and the Wrangell-St. Elias Mountains in Southern Alaska-fell prey to some pretty puzzling political maneuvering in the final hours of debate. For example, the Breaux-Dingell-Huckaby bill would have closed the Gates of the Arctic to hunting, except for a relatively small 60,000-acre "finger" in which the mining giant, Anaconda, wants to continue looking for copper. Representative Keith Sebelius of Kansas then tacked an amendment onto Breaux-Dingell-Huckaby that would have had Gates of the Arctic and the Wrangell-St. Elias areas use national park borders accepted by the House in 1978. This would have meant less huntable land in these regions than found in the Udall-Anderson bill. In the last analysis, the approved Udall-Anderson bill closed a little over 1 percent more land to hunting than the Breaux-Dingell-Huckaby proposal would have closed. But Udall-Anderson also put more acres of wildlife range off limits to hard-rock mining. a tradeoff most thoughtful hunters should understand.

All the bills presented in the House, including the final H.R. 39 version that passed, reduced the overall sport-hunting harvest of moose in Alaska by approximately 7 percent, the brown bear harvest by 12 per-

cent, and the Dall sheep harvest by 13.5 percent. The Senate's bill may make some of these losses even

Yet unless the Senate has acted by the time you read these words, and unless the President has signed into law an Alaskan lands bill, harvest reductions for 1979 will be at least 11.5 percent for moose, 16 percent for bear, and a sizable 37 percent for sheep—all because the Monument withdrawals under the Antiquities Act will stand through 1979. Both the National Wildlife Federation and the Izaac Walton League pushed all summer long to get the Senate moving on Alaska, but SALT treaties, energy hearings, and just plain political inertia ruled the day.

Unfortunately, overall the Senate is even cozier with developmental interests than the House. Paradoxically, while all the sound and fury has taken place over the House proposals on Alaska lands, the real threat to outdoorsmen's interests is in the Senate. For example, the current Senate bill would reduce the acreage designated as National Wildlife Refuge in the House bill by 43.6 million acres, thereby opening them to development, and at the same time the bill would transfer the remaining 35.9 million acres into National Monument where no hunting would be permitted.

SPORTSMEN, like other groups, are sometimes inclined to view the world through the tunnel of their special interest. But what may seem good for hunters in the short run may not be good for the long-term interests of hunting in Alaska. The last word on this great land has not yet been written. Perhaps it is not too late for all members of the conservation community to forget narrow differences in favor of the larger goal: making sure that Alaska will support significant numbers of big-game animals, waterfowl breeding grounds, and pristine waters for fishes into the 21st century. It may be the last place on earth that holds so much promise. What happens to this promise must be our concern.

SPORTSMAN'S CROSSWORD

Here is the solution to the Sportsman's Crossword Puzzle on page 20.

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The spirit of Canada: We bottled it.

never sure about a pup.

I walked up the creek while Nip hunted the brush on both sides, and we had gone half a mile or so when I saw quail running up the open bottom ahead. They were mountain quail—their plumes were unmistakable-and there were about twenty of them.

There is only one thing to do when you see any of the Western quail running: Make them fly—if you can. With Nip's help, these birds were soon flying. They flew on up the creek and around a bend out

of sight. We followed.

After we had hurried for 300 yards, Nip made one of her funny, little points at the base of the steep right-hand slope. The tangled greasewood in front of her was a yard through and half as high. I walked up and stopped when I was close and two quail buzzed out. One flew straight up the hill and the other swung left. I got the first at about 20 yards and had plenty of time to turn and kill the other with the tight barrel. Nip retrieved them both, though I had to give her a little help with the second, which she didn't see fall.

The next bird Nip pointed flipped around a massive boulder and my shot made a splendid pattern on it. You can shoot through branches when you swing with a grouse, but you can't shoot through a 10-ton rock.

By the time Nip had found the remainder of the covey, I had killed three more. Some I didn't shoot at flew back down the creek, some flew up either hillside, and some flew on ahead. I decided not to kill any more birds from this covey, and though Nip found several for the second time, I didn't shoot. Eventually, all of them had either flown out to one side or the other or else back down the creek. Nip didn't find any more

as we hunted on up the bottom. If my first estimate had been right. I had left fifteen birds in the covey. That made me feel good.

In another half mile I would leave the creek and angle up the western mountain to the rocky slope where I was to meet Willard. Then we'd hunt back to the car, higher than he came around the first time, and we'd have an excellent chance of getting into chukars.

Shortly before we came to the turnoff I saw a pool of water in the bedrock. It was about the size of a wash basin and there were quail tracks in the sand nearby, lots of quail tracks. They had all been made by mountain quail, which are bigger than valley quail. I called Nip. While she drank and tried to take a bath I studied the tracks. Quail had been coming out of the sagebrush to drink and then walking back into it.

There was water near where we found the first covey, so there was no need for those birds to come here. Could this be another covey? It must be. That would be something! I hadn't seen a mountain quail before that season and it was now

two-thirds gone.

When Nip had lapped up all the water she could drink and was as wet as she could get, we went on. There was a narrow flat with good cover between the creek bottom and the high-hand mountain. I climbed up out of the sandy bottom and started walking up the middle of the flat while Nip hunted back and forth across it.

We hadn't gone far when another big covey of mountain quail bounced out of the sagebrush. Nip might have flushed them. I couldn't see her in the sagebrush when they got up. But then, maybe she didn't. I was close and I may have startled them into flying. I hit one that cut sharp to

the right and then pivoted to shoot at another that whirred around me in a tight circle and flew down the

I missed it. No, maybe not. Its flight seemed a bit erratic. It flew low, nowhere more than 10 feet above the brush, and just as it was about to disappear around the first bend it towered. Then it dropped like a coconut out of a palm tree. Unfortunately, it fell behind the ridge that caused the bend in the creek. I couldn't mark it down.

The devil, whom I hadn't noticed before, put his hand on my shoulder and said, "Go after the rest of the covey. You'll never find that one,

anyway.'

But my conscience, in its small, weak voice, whispered, "You've got

to go back and try."
"If you do," said the devil, "all the other quail will run and you'll never find any of them."

THEN my conscience asked, with more spirit than usual, "Will you kill eleven quail just because you're too greedy to walk back 200 yards and look for a bird you know is dead?"

The devil countered, "You can take home a limit of ten and nobody will ever know the difference."

My conscience said, "Nobody but

vou.

So I called Nip and started back and I didn't see the devil again that day. I kept Nip at heel until we topped the ridge where the quail had crossed it, as nearly as I could tell. Then I said to her, "Dead bird; hunt dead," and we combed the brush back and forth and right and left until I was sure we had gone farther than the quail could have

I have never seen a bird tower that didn't fall dead, and an airwashed bird that doesn't move after it hits the ground puts off no scent. I've seen proven retrievers run right over such a bird without smelling it. And despite a mountain quail's blue and black and olive and white and chestnut, and its boldly barred flanks, it can be dreadfully hard to see. We looked for it in vain for half an hour and then gave up.

We hurried as fast as I could walk back to the spot where we had flushed the covey, then stopped to listen. After a minute or so I heard the softly whistled "Wh-wh-wh-whwh-wh-wh" of a mountain quail. It was the rallying call and it seemed to come from 100 yards ahead of us on the flat. We hadn't gone that far when Nip pointed a single and I killed it clean. When she pointed again three got out and I shot two of them. Nip retrieved both.

This made four birds out of the second covey, not counting the one I'd lost. It was a big covey; I knew I could get another and have the legal ten in my jacket. But I decided not to do it. The mountain quail is too grand a bird not to treat fair, and the one I'd lost was just as dead as if it were in my pocket.



"It must be windy up there today!"



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We went on and Nip found more quail, but I didn't shoot. I met Willard and we hunted back to the car. I suppose we got some chukars—we usually did—but I don't remember. I only remember the two coveys of mountain quail and Nip's finest work to that date and my good shooting—ten out of eleven shots. And I really don't feel very bad about losing one because I didn't go ahead and shoot another as I might have done.

For as long as I can remember, mountain quail have had their ups and downs, and the oldtimers remember peak years long before my time. In 1948 we had quail running out of our ears. There were no valley quail nor chukars in my hunting country then. Again in 1958 there were thousands of mountain quail. The exotic chukars and valley quail hit their first peak that year and the numbers of all three birds were simply incredible.

There was a big die-off in the winter of 1958-59 and they were all very, very scarce the next season. The chukars and valley quail made a good comeback by 1964 and mountain quail were reasonably plentiful. Since that time, however, they have dwindled steadily. If there is a ten-year cycle, they should have hit another peak in 1968, but they didn't. We didn't see many and only shot a few. Chukars and valley quail were abundant.

I didn't see one mountain quail

during the 1978 season. Some folks think the more aggressive valley quail have crowded them out. Not so. They have disappeared from areas where there are no valley quail—nor chukars, either. In these spots, where I once had good mountain quail hunting, there are none now.

Mountain quail, because of their habit of following creek bottoms and usually flying either upstream or down when flushed, are more vulnerable than either valley quail or chukars. You can follow a covey of twenty birds and you can usually take a limit out of it. And three or four hunters, if they were so short-sighted, could wipe it out. But hunting doesn't explain the scarcity of mountain quail. I go places where there is no hunting and, though they were once abundant, there aren't any more quail there than there are in the easily accessible areas.

OF ALL American quail, the mountain quail is the largest. The biggest one I ever weighed pulled my postal scales down to 10 ounces and I've killed a few that weighed 9 or 9½. But ten I weighed together on October 29, 1958, came to 86 ounces. Ten mature bobwhites, taken in midseason another year, weighed 73 ounces.

I think both bobwhites and valley quail are faster than mountain quail, but that doesn't mean they can't sift right along. Sometimes we find them along a stream where the alders, birch, aspen, and other provocations are as thick as the typical ruffed grouse cover. Here, they're tougher targets than grouse. I speak with authority; I've shot both in the same cover on the same day. It's great, but hard on ammunition. The only comparable hunting I've seen is grouse and woodcock—and I love that. It's doubly exciting when the dog starts to make game and you never know what you're going to miss next.

I wish we had woodcock in the West. But then, when I hunted in New England I wished we had mountain quail there. Strangely, because they're so different in appearance, habit, and habitat, I have the same feeling toward both. They're sweet birds. They're not like pheasants nor grouse nor chukars nor Hungarian partridge, which are all bigger and bolder and tougher.

A nonhunter probably would be baffled by my feeling toward mountain quail. I love them and yet I love to hunt them. I've watched them in the spring when I was fishing and the chicks were downy fuzz balls, each with a ridiculous little plume like an upside down tack on its head. I've watched them in the winter after the quail season was over. And during the past few years I've even watched them in the open season without raising my gun.

without raising my gun.

I'm not going to shoot any more mountain quail until Nature, in her mysterious wisdom, decides to let their tribe increase.



PHOTOS BY JACK SAMSON

Above are Atlantic salmon taken from rugged Icelandic waters. Right, some of the most popular doublehooked salmon flies



OF FIRE AN

BY BEN WRIGHT Ben Wright lives in Connecticut and is a former publisher of FIELD & STREAM

he winter's first snow has covered the terrace and birds are at the feeder; it's as good a time as any to check over and store one's fishing tackle until another season. I am shampooing 384 salmon flies, three each rods and reels, lines and backing, one pair of chest waders, and the usual miscellany of fishing accessories one carries in his tackle bag. The acrid odors seeping from the kitchen are reminiscent of a college chemistry lab.

This exercise in tackle-keeping would have been unnecessary if, last summer, we had conformed to the requirement of the Iceland Council of Fish Diseases that "previously used fishing tackle coming into the country must be disinfected."

Bob Graham and I were the only members of the group without the necessary certificates. Under the pressure of departure we had gambled that the airport disinfecting process would be routine, rapid, and inexpensive. Inexpensive, yes! Rapid, no! As we claimed our gear at the baggage carousel an official approached (Continued on page 66)