Don't Slam The Door

Some Suggestions For Hawk And Falcon Trapping In The Mid-Atlantic States With A Few Training Tips

And Some Important Life Tips D.B. Smith

For S.C.

PREFACE

I offer these thoughts to provide some information for soon to be falconers and others who don't yet know of the many techniques available to trap a bird of prey.

I fell into falconry as a child. I say fell because what other verb describes arriving in such a crisp and vast cavern in which one can never fully explore its edges or even completely describe its parts in a single lifetime. A place of endless mysteries requiring endless creative solutions. This seems to be where I am happiest. Nor have I ever wanted to or been able to climb out of this boundless cavern. One of only a few lifelong pursuits of this A.D.D. afflicted dilettante never to be perfected, more art than practice!

My overall fascination with animals and a few choice Morley Nelson films by Disney and the Hardy boys <u>The Hooded Hawk Mystery</u> propelled me to the University of Virginia Library at age eleven to try to

read the most modern available texts on falconry available in 1958. The only available books were more than one hundred and two hundred years old and very difficult for an eleven year old to understand. This led to my first comical attempt to trap a hawk. A narrative of this is included at the end of this treatise.

All of the people named here (those with last names) are falconers I have known. Some are living, some not, but I have learned from them all. I have included a modicum of humor (to me) as hawk trapping and related activities have always had those funny moments and "straight" trapping information can be a bit dry. Readers should be aware that in order to trap raptors, one must have a federally sanctioned permit to do so, such as a falconry permit, a bird bander's permit, or other scientific permit. I <u>strongly</u> recommend <u>non-falconers</u> read and study the glossary (157-164) first. Hopefully, this permits a readable offering.

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Road Trapping with Wilderness Will

When I was teenager, we (The Keswick and Central Virginia Hawking, Snake hunting, Photography, and Beer drinking Benevolent Society) went ridge-trapping at Jarman's Gap in the nearby Blue Ridge mountains or road-trapping whenever we were not flying our own birds.

Our leader was a unique man fifteen years our senior. Wilson Estelle was a self-educated wildlife photographer, falconer, herpetologist, and overall wildlife expert. Wilson and his wife lived in a trailer in the Keswick area just East of Charlottesville, Virginia. The rest of us, at least the core group, consisted of Colin Guy, Ron Frye, Tayloe Griffith, and me. There were other periodic members of all ages, usually local falconers or "snake guys".

Wilson started keeping snakes as a kid, and later worked with his father reproducing and refinishing antiques. Their shop, originally located on the road to Monticello provided a location to display Wilson's ever-increasing snake collection. Charging a fifty cent fee to see the collection so as to help pay for the snake's food soon led to an income that rivaled the antique-related business. Wilson added other wild animals to the exhibit which at one time contained bears, mountain lions, bobcats, hawks, owls, and numerous other species.

He had experimented with falconry, but unsuccessfully until he met two hawk obsessed teenagers with modern falconry books, Colin Guy and me, and later Ron Frye and Tayloe Griffith from Culpeper Reacquiring an old interest, Wilson quickly became one of the best falconers I have ever known.

Eventually, a new road to the historic home Monticello, forced the business to move to a new location with much less tourist traffic. The animalexhibit business was downsized, but the snakes remained. Members of the KCVHSP and Beer drinking Benevolent Society often went snake hunting to re-supply the exhibit and for fun.

We usually caught snakes by driving slowly at night along the Skyline Drive. The teenagers among us, and when we could talk them into going, took dates snake hunting and always checked out all of the overlook areas carefully, sometimes stopping for extended periods to "wait for the snakes to come out".

Wilson and his wife were surrogate parents to many of the younger members of our group, and we respected him because he treated everyone,

regardless of age or experience, as an equal. He always asked and respected our opinions, and evaluated them based on merit.

An occasional prankster, he was always funny. For example, he created nick names for us all: he was "Wilderness Will", Ron Frye was "Reckless Ron", Colin became "Calamity Colin", Tayloe acquired the prefix "Terrible" and I was dubbed "Dauntless Doug".

Wilson proved to be an excellent trapper, His eye-sight was nothing short of super-human, spotting birds and noting species which were sitting three or four trees deep in the woods while the rest of us were still asking which tree line.

When nest-hunting, his wildlife photography experience, excellent vision, general wildlife knowledge, and climbing abilities often led to quick finds. Where he developed his climbing abilities, I don't know. Once, when he was in his early forties, I watched him climb about 15 feet to the first limbs of a huge old oak tree so large he could not get his arms and legs around it. Digging his fingers into the bark and gripping the trunk with his legs, he managed to ascend like a squirrel until he reached the first limbs! But his forte was road-trapping!

In the early sixties, seat belts were not in common usage and bal chatri designs at that time didn't include the "frisbee style" or other throwable designs. The bal chatri was dropped from the open, passenger front door by the passenger leaning out of the moving vehicle and placing the trap on the shoulder of the road. The driver's job included watching the hawk to be trapped, being aware of the traffic front and rear, holding the vehicle half on the shoulder and half on the road, estimating how close to get to the raptor without spooking it, finding the least noisy and most level surface to drop the trap, tightly holding the belt of the person dropping the bal chatri, reminding the drop man to keep his fingers out of the nooses,

telling him when to release, and reminding him "Don't slam the door"! Even with his straight-stick old jeep, none was better at this than Wilson.

Over the years, using bal chatris, harness birds, and noose carpets, we caught Redtails, Red shoulders, Broad wings, Kestrels, and Cooper's here in Central Virginia. There were, of course, many failures as we learned what to do and not to do.

On one occasion, Colin broke his collar bone throwing a harnessed pigeon as hard as he could from the passenger window up and over my car at a Goshawk cruising the ridge line far above us along the Blue Ridge. Colin's nick name, "Calamity" always seemed to fit. Once, after consuming a six-pack he had brought along, he fell out of the back of Wilson's new Land Rover while snake hunting on the Sky Line Drive and broke his arm. The story we concocted for Colin's mother required a lengthy tale and involved abandoned baby bobcats (Colin's mother loved kittens!), stone walls , and ten foot cliffs. Suffice to say, it was a doozy.

In my case, the nick name "Dauntless" might have been a synonym for "Too-Stupid-To-Know-Better" or "Always -Wears-Blinders-When-Approaching-A-New-Situation".

We developed our own "shorthand" language while road-trapping so that "'tail, immi, tree-line, right, 300 yards, just past the turn sign!" was understood by all so that our efficiency and speed were enhanced. (Translation: I have just seen an *immature Redtailed hawk perched on the right, in the tree line, 300 yards from the road near the highway turn sign.*) And although the reasons weren't always known to us then, certain places always held similar species.

Due to their mobility, "birds are exploiters of small food patches". As long as there is food available, birds go to it. Be it crops, seeds, insects, or larger prey species, the resident small birds, passerines, and hawks follow.

As the weather cools, insectivores and avian mammal or bird predators, especially those that winter-over must switch their diet or perish. In extreme weather these birds sometimes make shorter migrations to better weather areas.

We noted that passage Kestrels could always be found mousing along particular stretches of phone lines. Other areas usually held Redtails or other buteos, but what cues brought these raptors to the same areas time after time, year after year?

Birds of prey are quick learners (often one lesson) and will usually return to a location of previous success, thus trial and error can lead to habit. Later scientific studies revealed the Kestrel's and Rough legged hawk's ability to spot the ultraviolet signatures of the urine and fecal trails left by mice and voles. I believe similar cues exist for other raptors. Shortwings, and falcons while cruising on their appointed rounds, easily pick up the regular locations of concentrations of small birds.

Since many birds have tetrachomatic vision (ability to see into the ultraviolet spectrum), and many small birds appearing dull in our visible spectrum are brightly marked in UV colors, it is probably a factor in prey selection, certainly flash-patterns.

Try to learn the habits of the particular hawk you want to trap and where to find them. For instance, wintering passage Redtails can usually be found on the far edge or outside of the hunting territory of a mature local pair, rarely in the middle of their space.

Along the migration paths, the first year birds, kicked out of mom-and-dad's nesting territory, usually pass through first, followed by the mature birds somewhat later. Phone calls to Hawk Mountain and Cape May counting and banding stations will tell you what is currently occurring during the migration. Here in the East, if you want to trap in the mountains, the best days feature a northwest wind following a cold front. On the beaches and on the shore, cloudy days without strong thermals, and with stronger southeast to southwest winds seem the best. For most species, the end of September to the end of October seems the best time for the migrants.

Practiced safely, road trapping, is wonderfully entertaining pastime. Traffic and curious people are to be avoided. Stick to country roads. NEVER drop on the interstates. Choose the time of day carefully for the least traffic, early morning before rush hour, before the birds have found their first meal is usually best, but just before dark can be a great time, especially in very cold weather. In general, the colder the weather, the hungrier the hawks, and often the raptors can be spotted perching low to grab any calories that become available.

Always make sure your intended raptor can't drag the trap or harnessed bird into a dangerous situation. Use the right trap, bait, and presentation, and catch 'em all.

Life Tip: To put the Maraschino cherry on top of a less-than-perfect day, *don't* get angry in the morning when your girlfriend calls to break your date, and to dump you after you've gotten tickets to some girly concert just for her, and she finally tells you she is going to be dating Booty R. You may take a perverse pleasure in knowing this guy has the habit of "kissing and telling" with great detail! And later in the day when you go to feed your freshly-caught pigeons, and find a raccoon has broken in and killed three of them, and left a hole large enough so that the rest of the birds have escaped; *don't* call your buddy on this overcast and rainy weekend and talk him into going pigeon hunting that night, and because it is such a dark, rainy night, and after a long walk you arrive drenched at an old silo, partially open at the top, so it is only "huntable" on very dark nights, but always has a multitude of pigeons so that once inside and before you have to climb to the top and scare the pigeons so that they flutter down the walls of the silo, you *look up with your eyes wide open* even though it is pitch dark, and you already know you can't see to to the top of the silo...... The splat is large enough to be clearly audible. Take *solace in that, even though the rain is now letting up, it will eventually wash away most of the uric acid and fecal material in your eye.*

A Preference for Passage birds:

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Why a passage bird? After many years of hawking, I have definite opinions about what works best for me. (If you've ever met an old hawker who didn't have strong opinions, I like to hear about it. In a group, they have always reminded me of a room full of old silverbacks.) Anyway, my preference of birds to train is short! Number one will always be the passage bird followed by the imprint, store-bought or one from the nest.

In my opinion an exception to this rule is: Redtails should never be imprinted or even chamber raised. Sorry breeders. I have known of chamber raised 'tails which hit their trainer in the face, attacked dogs and were just as dangerous as any imprint. In my senior year in college I did a "Senior Project" (like a minithesis for 6 hours credit) on imprinting in raptors. I imprinted a tiercel Redtail for study purposes and did a large amount of research on imprinting in general. The tiercel was a monster! He took most of his aggressive activity out on our poor Great Dane and also hit me upon occasion. From study and observation, one thing became apparent. Various mal-imprinted species can become excessively aggressive towards inappropriate species. This response varies as to species and methods of imprinting. Ever see a fully isolated, hand-raised, imprinted pigeon? Wow! They often go after anyone other than their parent/sibling model. But an imprint Redtail will attack anything, and with their size and power, children and pets could be in real danger with them around. As food for thought, contrast this with Our American Cowbird and the European Cuckoo which never seem to imprint!

A Redtail taken in late November, December, or early January in the mid-Atlantic states will have been forced to learn how to deal with gray squirrels. When temperatures drop, mice, voles; and rabbits are hard to come by; young prey birds can now fly like bats outa %#&&; and snakes and insects have disappeared.

The mice and voles now spend most of their time in their tunnels and the easy summer rabbits have become nocturnal, hiding in heavy thickets during the day. The only active small mammal is the gray squirrel.

These late season 'tails (late November, December, and first half of January) when trapped and trained, are nearly always ready for the squirrel woods. I've rarely had to do the "squirrel trick" with these passage birds.

The "squirrel trick" is a simply an entering tactic where an assistant throws a dead squirrel (tied around the neck with a line) over a limb in the hardwoods, lets it drop into the leaves below, covers the squirrel with leaves, and then conceals himself. Upon a signal from the approaching falconer, bird on fist, the assistant pulls the "escaping squirrel" up the side of the trunk of the tree letting it jam against the fulcrum limb where the Redtail probably already has it. The bird is allowed to feed up on the squirrel, and you now have a started squirrel hawk.

Sometimes an experienced bird goes to the leaf nests and tears them open enough to drive out any squirrels inside. Most passage Redtails don't automatically do this, but it is easy to teach.

Build an artificial nest out of dry leaves within a framework using long sticks as supports (like the vertical framework for building a basket). Fill it with dry leaves. Provide a hole near the bottom and suspend a dead squirrel on a string within the "nest" with it's tail hanging out a hole at the bottom.

With the use of a ladder secure the "squirrel nest" as high as possible in a tree. Run the line to the squirrel over a higher limb and and the assistant should hide behind another tree. By jigging the line a bit, the dangling squirrel tail will usually bring in the hawk to attack the squirrel. If not, the assistant drops the squirrel down the trunk and pulls it back into the nest before the hawk arrives. One or two lessons of this nature will have your hawk attacking every leaf nest he comes across.

We once tried to build a semi-permanent nest complete with a PVC tube in the middle to allow the squirrel an easy passage. It did not work as well because the hawk apparently needs to see the leaves greatly disturbed to figure out that leaf nests have squirrels inside. Actual squirrel-hawking with a Redtail tuned to attacking leaf nests will provide a variable reward system which reinforces this behavior.

Passage hawks and falcons have had to feed themselves every day since fledging. Some species stay with their parents for a while learning how and what to hunt, but by the time of migration virtually all of the young birds are on their own. At any rate, most passage birds have a great deal of experience by the time they are captured. These birds can teach the falconer what has been successful for them, therefore how their style might be modified to suit the falconer's style of hunting. Passage birds already know what it takes to get a meal a year before a chamber bird or an imprint. If properly handled they have perfect manners, become tamer and tamer with their trainer, and partner in hunting. If you want to catch game right out of the gate, get a passage bird!

Chamber raised birds and the imprint must be taught everything. They often don't know what their feet are for or how to use them. This is especially true of falcons. The advantages of imprints over chamber-birds is that they love you, so they are harder to lose, and one can fly them at higher weights helping them stay healthier. Depending on

the species and the breeder, the chamber-raised bird often must be treated like a passage bird that knows nothing, as it is basically a flying brancher. It can be as wild as any passage bird and have all the faults of an improperly-trained imprint. If not trained properly, the chamber-raised bird will often mantle and be very possessive of food. Some species will attack the trainer. But, after a year of hard hunting, most seem to be excellent falconry birds as long as weight control is maintained.

Imprints take just as long to learn as chamber birds, but have lower stress levels as they see their trainer as a parent/sibling figure. They can, as mentioned, be flown at higher weights than their chamber-raised brethren, and are always tamer and fun to have around. After a year of hard hunting, they too are approaching a good passage bird's level.

The 19th century and earlier, falconers had no use for eyas birds. They wanted passage or even

adults birds. Of course they seeled all of their freshly captured birds, and had a knave or two around to carry and "wake" their new charges for as long as necessary. I used to do this until someone told all of my peasants, serfs, knaves, retainers etc. that the Feudal system died about 500 years ago.

Today it is considered bad form to remove a mature and probable breeder from the population, but passage birds, especially late-trapped birds, have already developed successful hunting techniques. As mentioned, a late November/December Redtail has here in the east, already moved into the hardwoods to hunt squirrels. This is a real plus as I have seen September-trapped 'tails turn into screamers.

Since late-taken passage birds have had to look for and find quarry on a daily basis they are the equivalent of a second year falconry eyas, and they usually don't mantle, scream, nor exhibit other unwanted, poorly raised eyas traits. Life Tip: *If* you are a slightly paunchy, past middleaged Englishman who always attends the fox hunts in western Albemarle County in your "hunting pink" scarlet jacket uniform and has a tendency to drink so much and so often at the after hunt get-togethers so that your mare has been conditioned to take you home semi-conscious while leaning precariously from the saddle; *don't*, in an attempt to get home more quickly when you run out of single malt, suddenly "borrow" a visitors' classic, old, chain-driven, blue Norton motorcycle and go racing across the field toward the nearest gray board chicken-coop type jump in the far fence line, and in the ensuing disaster when everyone comes rushing up to you to check as to whether you're still alive, and you are still lying, sprawled and askew, in a mass of bright red against the still verdant orchard grass, wooden fence pieces, and metal, don't offer an explanation of: "God damn-

it! I kicked her, but damn-it, she wouldn't rise. I kicked her and she wouldn't rise! I even used my crop!!!"

Some Raptor Species Characteristics

The first thing to consider when choosing a species of hawk to trap and train is what PREY species are readily available to you. There is no point in having a Saker and a pair of salukis to hunt gazelle here in the mid-Atlantic states. One should be able to provide, at a minimum, several suitable slips per day to allow your bird to develop and not get discouraged.

Next, how does this potential killer of grizzly bears go about his normal business in the wild? Is it one that goes right in and closes with its quarry on the ground or in a tree, or "snatch and carry", or does it prefer to buzz the potential food item to force it to take flight. Does it prefer fur or feather? Does it hunt from the wing or a perch? The following are several of the most readily-available birds of prey here In the Mid-Atlantic states. They range in trainability from easy to "Damn! why did I ever try this?!"

Redtails: Redtails (1.8-3.3 lbs.) most commonly hunt small mammals from a perch, though I have seen them stoop from a soar at pigeons, robins, starlings, and meadow larks (late summer, young larks).

There used to be a mature male Redtail which one Winter, regularly hunted and caught robins in the harvested soybean field behind my house in Virginia Beach. The bird would perch in a tall pine across the field about 300 yards from the robins, who were plying their wormhunting skills. This Redtail seemed very deliberate and after the robins moved behind the small undulations in the field, he would drop vertically from his perch to a glide just a few feet off the ground. The momentum of the vertical drop gave him sufficient speed to glide across the field quickly, pop over the little mound in front of the robins and he was right in their midst. Home from work and sick with a virus, I watched him take two birds this way as well as having several misses. Redtails have no qualms about ground quarry, piling into it with force. They, of course, kill with their talons and

he trap.

powerful feet. They are bold, creative, and excellent falconry birds. What a gift that they are so easily procured and trained. In the wild, they usually hunt from a high perch, dropping onto fairly close prey items.

As falconry birds, they are most commonly trained to follow the falconer through the trees or hunt from a T-perch in a field, but they can trained to hunt from above while slope-soaring and they can even be kite trained. They are the only Eastern hawk who regularly hunts gray squirrels and seem to be instinctive about "bulldogging" them thus escaping the squirrel's teeth. (Or the ones who don't learn to "bulldog" squirrels develop severely infected feet leading to sepsis and die off?) As far as attack style (hunting from a perch) what is true of Redtails also applies to the other buteos, but why one might want any of the other Eastern buteos

he trap.

(unless you have a taste for frog legs), I don't know.

Accipiters: (or akip i ter as my 7th grade latin teacher would correct me.) There are three species in this family, The two larger ones, Goshawks and Cooper's hawks, are the most commonly used in falconry. The Sharp-shinned hawk, smallest and rarely used for falconry, is almost entirely a bird eater. The Goshawk and Cooper's hawk also eat birds, but they actively pursue many smaller mammals. Cooper's eat a lot of Chipmunks and Goshawks love Red squirrels.

Sharp-shinned hawks (3-8oz.) have several styles of attack. Chronic carriers they seem to prefer a snatch-and-run tactic with small birds only dispatching the quarry on the ground if necessary. They seem to target smaller passerines and will eat on the wing. Most of my

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he trap.

observational experience has occurred while watching them on migration where, on the Eastern Shore of Virginia, we, on occasion, saw as many as 500 or so rising from the trees at mid-morning and heading up to find thermals and a southerly-heading wind to travel. We sometimes watched them pursuing and catching small passerines after a twisting acrobatic flight out of the woods and above the field. Unfortunately, in the past several years the reports of numbers of Sharp-shins at Cape May and Hawk Mountain have been reported down by 70 percent! Are the increasing numbers of Cooper's Hawks displacing them?? At any rate, like the Cooper's Hawks, Sharp-shins are crepuscular and when hunting within a hunting territory also appear at a given location at approximately the same time each day. As a kid one winter, I watched a musket (male) regularly

scare the little birds from my mother's feeders into the adjoining line of large boxwoods then methodically work through the line of shrubbery until the Snowbirds, Cardinals, sparrows, Purple finches, etc. were pushed into the open at the end. This little guy appeared between 11 a.m. and 11:30 a.m. almost daily.

If you have read and studied Jack Mavrogordato's "<u>A Hawk for the Bush</u>", you might get some idea of the degree of difficulty of training our smaller version of the European Sparrow Hawk. The passage birds seem very challenging when one considers their metabolism and the precision required for their weight control. But, they are exciting little birds.

I've only trained one, a five day old imprint, "Gnatty Bumpo". Her first kill, on her second day of being flown free, was a very naive Mockingbird that came in to scold her. Later, in her falconry career, she easily caught a lot of starlings, sparrows, and "leave-it-lays" by following in the trees. Although she never caught one, I learned just how fast Robins (a close relative of the European Blackbird) are.

Incredibly acrobatic, she was a wonderful little bird. She sometimes hunted by sound in the woods taking off after Bluejay scolds in the near distance. Sharpie imprints should be taken very young. I've never had the guts to try a passage one, but if you're good enough or anal enough, go for it. Wild Sharp-shins have one of the highest capture-per-attempts ratios among native raptors.

Goshawks (1.5-2.6 lbs.) Other than the few (3) I've trained to hunt from the fist or follow through the trees my experience is limited. In the wild, I'm told that they hunt from a perch or on the wing . I have seen them on migration along the Blue Ridge mountains. Here in Virginia, they are occasionally caught along the Blue Ridge in bownets and on noose carpets. They are known to winter as far south as Georgia, usually in and around the high alpine meadows. They respond well to lure birds and can be caught after catching and while dispatching the bait bird and dragged to a bownet or onto a noose carpet. They are also captured on noose harnessed birds. Courageous, they seem to have no fear of a "knock -down-drag- out" on the ground. They will readily take feather or fur but are not always a great choice for our Eastern Gray squirrels as they are more used to the smaller Red squirrel. Hence they don't instinctively "bulldog" our toothy gray guys. Oops! That used to be a nice toe!

Goshawk is German for goose-hawk. And it is certainly possible, given appropriate conditions, but ducks are a safer match, and pheasant seem easier depending on the slip. They excel at bunnies, and can take quail and other small quarry.

Then we come to the sneakiest short-wing in existence in the USA: the Cooper's Hawk. (10-24 oz.) They almost need a full chapter for themselves.

Coop's have several hunting styles, including cruising or sitting, often over an area where there is a visible food supply (like my pigeon house). Like the Sharp-shin, they seem to appear around bird feeders etc. at the same time every day. They are famous for walking into pigeon houses or quail boxes. They've been known to run young rabbits down through the brush on foot. They are certainly the most agile bird of prey on foot I have ever seen. They can't usually catch a pigeon in full flight, preferring to wait until the pigeon is arriving to go into the pigeon house or to roost. Then a sudden onslaught, and the pigeon is caught. As far as training a passage Cooper's Hawk, every once in a while one gets an easy angel, perhaps onein-ten-or-twenty birds, but they are rare, and as a general rule, passage Coop's are tough.

On migration, Cooper's seem to continue to hunt during the morning hours until the middle of the day. The Sharp-shins, on the other hand appear to grab the first thermals, around 10 a.m., and head for the ceiling. Both are again vulnerable to nets and traps in the afternoon when the thermals die, usually after 4 p.m. until dark.

None of the short-wings are what I would consider "beginner" birds and should only be

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tried by experienced falconers. Of the three passage species, the Gos' is probably the easiest to train.

There are three possible passage falcons available to us here in this part of the world: the Kestrel, Merlin, and Tundra Peregrine, all with somewhat different hunting styles in the wild.

Kestrels (3-6 oz.) "Dapple dawn, drawn falcons" ("The Windhover" by Hopkins) are delightful little birds which tend to perch or hover over insect quarry, mice, and sometimes small birds. Most falconers consider them a beginner's bird, but they have the ability to be much more.

I once had a pair that I trapped in late winter at a cattle feed-lot outside Albuquerque, N.M. using a bal chatri filled with sparrows. These kestrels were there for most of the cold weather months feeding on Starlings and English sparrows. Once trained, they would go after both of these prey species from hundreds of yards. Kestrels are easily trained to catch Starlings and sparrows out of a car window, but usually the quarry is right next to the roadside. My experience led me to believe much greater distant slips are possible. One can also lure fly Kestrels, and probably teach them to hover for short periods.

As an aside, Tayloe Griffith picked up a Kestrel captured by a Meadow Lark. While eating at a fast food restaurant, he happened to see the Kestrel tangling with the lark near the edge of the adjoining field. Within a minute, the Kestrel appeared to be trying to escape. Running over he found both birds on the ground and the Kestrel, talons buried in the Lark's chest, was being held at the base of its primaries in the Meadow Lark's feet. He was able to pick both up. I have seen Starlings hold onto trained Kestrels like this, but this was a wild falcon! I haven't figured out how to exploit this into a repeatable trapping technique.

Kestrels tame very quickly. In fact I don't remember where I heard or read: "The only difference between a passage or an eyas Kestrel is the passage bird will take a week longer before it is looking in your breast pocket for tidbits." These birds become completely tame. Their size, however, demands precise and frequent weighing for weight control. They are delightful little birds whose potential has yet to be realized.

The passage Merlin (4.5-8 oz.) is my favorite falconry bird. I have flown a fair number of them and their hybrids, and I believe the famous magician of the same name was so dubbed by observers of this little bird's flying, hunting, and killing abilities. They are truly magic! They are almost like a miniature Gyrfalcon in both habit and hunting technique. They are afraid of nothing in the air and delight in harassing larger birds of prey.

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Besides seeing them harass buteos, harriers, and an eagle, I once watched from my office window in Virginia Beach, a wild jack keeping five Crows pinned in a large pine tree for 15 minutes. The Crows, cowering close to the trunk, tried to leave a couple of times, but the tiny jack drove them back each time. After almost 15 minutes, the jack tired of his game and drifted off. After a minute or so, the Crows left hugging the ground in the opposite direction.

Merlin do not hesitate to take quarry larger than themselves. This is possibly because Merlins kill a little differently than other falcons. They strangle their dinner, always seeming to grab their quarry around the neck, often with the talon from their very long middle toe, penetrating the neck and damaging nerves and arteries. Large pigeons almost twice the Merlin's weight, taken in this manner don't seem to struggle very much or very long. (The one Aplomado falcon I trained also used this method.) Although Merlins are known to hunt from a perch, most of those I have trapped have been cruising or heading up to catch a thermal during migration. They can be trapped immediately after consuming a small bird. We have had them come to our lure bird and be caught after observing them feaking on a perch after a meal.

Their speed and endurance is hard to believe. The wild birds seem to be capable of pursuing cruising Mourning dove from a distance and flying right up their tailpipes. Nearly all of the passage birds I have trained have tried this a few times, indicating to me that they had done this before and were successful, but not being in the condition of a wild bird, none of my birds succeeded.

I have taken a number of dove with Merlins, but the Merlin always had the advantage of height, and if the dove wasn't taken in the initial stoop close to the ground, the merlin made a series of very short stoops, driving the dove to the ground where it was taken.

Merlins are carriers by habit and need to be trained to wait with a kill on the ground. By using a small bird effigy as a lure with an electrical clip pointing forward where the head should be and attaching a chick or sparrow head backwards, clipped through the beak to the front of the lure. Merlins learn, after a while, to only eat the head of their quarry then wait for the falconer to pick them up for the remainder of their meal. Most learn to hop from the lure to finish eating. When on quarry however, it is usually necessary to pick them up with their prey, then I help them break-in and feed them up.

I had a pre-telemetry Merlin kill a Bobwhite quail deep in the woods that I could not find. This was near my home and I quickly got my German Shorthair who located and pointed the Merlin and quail nearly fortyfive minutes later. The Merlin was sitting deep in the woods on the headless quail at the base of an oak tree and had not plucked the first feather.

If your Merlin does carry a small bird into a tree and eats it, it too, can usually be called back to the fist or lure right after finishing. These birds have many other endearing qualities such as caching, and quickly returning to the origin of a flight after a miss, but all of this is beyond the scope of this little diatribe.

The Tundra Peregrine (1-2.1 lbs.) attacks from height with a stoop, by direct pursuit, and from a perch. They are capable of deception by appearing to fly away, up-wind to get higher, then turning and stooping down-wind with great speed. They don't like to close with quarry on the ground unless it is grabbed in the air or stunned from the stoop. They are entirely bird-oriented. Most people train them to wait on in the classic style, but they make great pursuit birds for crows, pigeons, small ducks, and the like.

Peregrines have been clocked while stooping at 242 mph. In level flight they average between 40 and 60 mph. Most Tundra birds having never seen men, tend to train very quickly. Usually they tend to be very gentle once trained, But Lud Clark has one on the nastiest females birds I've ever seen, and I've heard of others recently from some of Texas falconers. Hope this doesn't represent a trend!

Life Tip: *When* fishing for Rock fish (Stripers) in the Chesapeake Bay with a couple of old friends, and showing one of them some of the features on your new latest and greatest high-dollar cell phone while he's jigging a white bucktail jig off the bottom, and when he suddenly hooks up and fights a large, and very unexpected Red Drum to the surface, *don't* *carefully* secure your beer bottle behind in a drinkholder and put your two day old phone away in your breast pocket, then *lean over the gunnel to see how big the fish is.*

Bait Presentation

Bait movement and presentation must be considered the sine qua non of all trapping. All visual predators respond to flash patterns created by their quarry. Movement, pattern, and color (including I believe, UV colors) are most important. Motivation of the particular raptor figures into all of this. We falconers usually depend on hunger to be the primary motivation for successful trapping, but birds of prey have other drives which can bring them to our nets or traps.

All diurnal avian predators seem to be natural pirates and also love to attack nocturnal enemies like

owls. Hawk watchers at counting stations regularly employ owl decoys to lure diurnal raptors.

A good realistic artificial owl decoy can work for trappers with dho gazzas. Especially if one incorporates a live bait bird (like a sparrow, dove, or other). on a line which can be drawn up to the feet of the owl decoy, thus bringing out the "Get the Damn Owl!" thought as well as piracy motives in the hawk.

There are real, mounted owls on the internet from pre-protection dates with paperwork to show they are legal. Since they are so old, most of them are pretty ratty looking, but a few chicken or other feathers might make them appear intact and still effective. Their price is high, starting around \$200 at this writing.

Realistic artificial owl decoys covered with actual feathers are available on the internet for a few dollars. They are used to frighten pest birds from gardens etc. After a week or so, the pest birds ignore them, but as long as people keep buying them, they will keep making them.

When trapping Merlins on the Eastern Shore, we found that parakeets in a cage behind our dho gazzas were very strong attractors, and Merlins, short-wings, and Peregrines would switch off our lure birds (even sparrows) and on to them upon approaching our nets. Its never been clear whether this was due to their bright visible spectrum blues, yellows, and greens or uv color or the fact, being cage birds, that they sometimes continued to move while the raptor was coming in. If treated very gently, parakeets can even be used as lure birds for short periods. (A few hours) However, they bite (ouch!) like a demon (ouch!) when you're trying to get them into a Tyvek harness.

Some birds like the short-wings and Redtails will come in to predator calls. Distressed woodpecker, Flicker, or Starling calls seem to work for Coopers and Sharpies and rabbit distress calls will lure Redtails.

I recently learned from my friend Gerald Gieger that a western bander friend of his in Northern Montana uses brief Goshawk immature food begging calls followed by a short distressed rabbit scream to bring in immature Goshawks up to five months after probable fledging.

During the migration, on one occasion however, while I was using a distressed Flicker call, six migrating Flickers flew in and would not stop loudly scolding until I cut off the predator caller. Falcons, I've observed, never seemed to respond to these audible cues.

Note: If for whatever reason, you want to trap an owl, set up a bal chatri at night with a predator caller and play rabbit or baby rabbit distress calls. I have had Horned owls, Barred owls, and even little Screech owls come to my front yard in hopes of a meal.

Using sparrows or other small birds as lure birds, I make harnesses out of letter-weight Tyvek. One year I forgot or lost my Tyvek harnesses and spare envelopes, but had a blaze orange envelope holding my fishing license. I cut it into a sparrow harness. It seemed to perform better than the white ones. I have since always used colored Tyvek, but I have no comparative studies to validate this theory. I have also noticed that white birds, dove or pigeon, are stronger attractors than darker colored birds. There is a reason albino and partial albino critters don't live as long in the wild.

I learned recently that birds can be dyed with <u>food</u> <u>dyes</u> that are not harmful to the bird. The dye stays until molted out. With thoughts of creating strong flash-patterns from the method I found on the internet, I found that the dye only works with white

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birds. Imagine a navy-blue and orange pigeon or dove (or clothed in your team's colors). Ron Frye wants me to dye one of his big white homers, chartreuse. At any rate, this is an area that needs experimentation.

The movement of bait has always been a problem. How many time have we seen bait in a bal chatri stop all movement due to cold weather or repeated attacks by raptors.

Andrew King told me a trick I didn't know: smear peanut butter on the rear end of mice, hamsters, or gerbils so they immediately feel the need to groom.

I understand the new pet fad, Dwarf Robo-Hamsters (only 2-3" long) act like the energizer bunny, they never stop moving. I have not tried them, but coming from a desert environment in southern Russia and beyond, they must be more cold tolerant, and if kept outside, they might be excellent B.C. bait. They are not cuddly like other hamsters. In order to promote bait movement in B.C.s and behind nets, etc., I have considered making a battery powered "Skinner box" type cage. I rejected this however, for a number of reasons. I have also recently developed an improved bait container that should work well with nearly all traps.

This idea was adapted from the bait cage of the Ross merlin trap (see "*Hawk Chalk*", Dec. 1990) The other source for this bait cage came from "<u>Bird</u> <u>Trapping & Bird Banding</u>" by Hans Bub. available through falconry supply companies and others on the internet. This is a marvelous book showing trapping methods from ancient times to now, around the world, for all types of birds.

The cylindrical bait cage used in the Ross merlin trap is properly called a fyke container. It is suspended with rubber bands and swivels creating movement. The fyke container used in the Ross trap is made from a polypropylene net produce container(like an orange bag). It is supported by swivels and rubber bands at each end, stretched out and suspended. Two, four to ten inch metal rings are used inside to create the cylinder shape. Small birds, (English sparrows) are used for bait.

I prefer using much stronger clear nylon monofilament netting (3/8"to 5/8" square) cut from heavier gill netting or 210/24 multifilament thread seine netting in 1/2" or 3/4" mesh. I dye the seine netting black. In a pinch, netting can be cut from an old nylon casting net. (I never did learn to throw that thing correctly anyway!)

Fyke containers can be as large as needed and suspended horizontally or vertically. Movement with this cylinder can be imparted with swivels and rubber bands, or as I decided to try, with a servo to spin the cylinder briefly. Think of a powered tread mill. I put together one of these using a model car remote and a good quality servo. The electronic components cost \$143.00. This remote and servo can be adapted for a number of applications. For example a fyke-type cage can be suspended horizontally within a large B.C. with a swivel on one end, and a mounted servo on the other, and spun from a distance. The servo can also be used to fire a bownet or release a bird from a launcher. Fyke-type bait containers can be made from hardware cloth for rodents or netting for avian bait. Servo motors aren't very strong, so when using hardware cloth, make sure your cylinder is perfectly round and balanced.

An ancient Japanese method for trapping large falcons utilizes a sixteen-foot-long net fyke container, over three feet in diameter placed perpendicular to and underneath a large dho gazza with the fyke container extending equidistantly on either side of the net. Six or so bait birds (pigeons, doves, Starlings, sparrows, etc.) fleeing a stooping falcon will fly from one end to the other of the cage. Eventually the raptor will hit the net. It would help to condition your bait birds by placing them in this long cylinder for periods of time at home and once in a while scaring them to fly from one end to the other.

When trapping, it helps to harness one of the bait birds in the fyke cage.. Run a lure line through a small (one inch) ring attached to the top of the three foot middle ring of the fyke cage to your blind, and when a raptor is around the set, suspend and gently jig the harnessed bird.

If one is to use birds as bait, especially in a fyke cage, B.C., or box type trap. the cage must have sufficient interior space to allow the bait birds to flutter or flap. It is the frantic attempt to escape that both triggers and/or increases the predatory response. Whenever possible, always have at least two or three birds in a bait cage as they stimulate each other with their movement. The proper use of blinds is most important at fixed station trapping sites. I have trapped all manner of birds from blinds as simple as a beach recliner with a camouflage blanket covering my feet to my neck to an elevated plywood blind with a bench seat, a floor, tables for scales, a large number of cubbyholes with various sized raptor holding tubes, hooks for binoculars etc. and a refreshment/lunch table.

The primary purpose of a blind is to hide the trapper from an incoming bird. To this end there are aa few important rules. Never place your blind directly behind your nets, trap, lure bird etc. An approaching bird of prey tends to focus fairly tightly on the lure bird or bait when he makes his approach, but he does have good enough vertical and lateral vision to notice movement within his cone of vision. Blinds should be set at least at a forty five degree angle to the trap and at least thirty feet away. The best trapping site I've seen was a banding station on Fisherman's Island at the tip of Virginia's Eastern Shore. The very tall lure pole, 20' or so, dho gazza's, bownet, and a mist net were set in a large depression and the blind (an elaborate plywood affair with even a wooden floor) was up on a dune at the back edge of the depression at a forty five degree angle and ten to fifteen feet above the set-up. This gave the trappers the ability to see farther and easily spot birds to be lured into the nets and traps and made it almost impossible for the lured birds to see the trappers.

Blinds may be constructed of almost any opaque material, preferably something natural looking. One can use tents, natural materials such as branches and reeds, portable deer blinds (should be black inside to help hide any movement and viewing port should be reduced with a cloth or something to a small slit.), camo-painted plywood, or even a car with a blanket with peep holes over the windshield. Birds of prey like many species of wildlife pay little attention to cars until they see movement of the people inside.

I have a current blind system made from three thirteen feet long by five feet tall reed privacy fencing. The sections are easy to roll up and very lightweight. These "privacy" fences are not completely opaque so I used spray contact glue to attach black cloth to the back of the reeds. This system lends itself to a variety of configurations with a simple PVC frame.

Life Tip: *After* an exceptional snake-hunting trip at night along the the Skyline Drive, and you've caught two yellow phase and one large velvety, black phase Timber rattler so nervous that they all start buzzing at any sound around them, two Copperheads of average size, and a nice Milk Snake all for a friend's "snake farm", and you've stored them in snake bags under the hood, *next to the gas fill* of your father's old V.W. bug; and, *if* you're not interested in seeing the new world record backwards broad-jump accompanied by a piercing scream, *don't* stop late at night for gas at a full service station with a young attendant and ask for \$5.00 worth of regular.

As a corollary, don't put the bags into individual, closed cardboard boxes and place them under your mother's desk in the living room and forget to tell her at breakfast. *It is important* to tell her after she has found and opened one of the boxes that you fully intended to wash her now snake-shit fouled, good pillow cases that you grabbed the night before when you could not find your snake bags last night prior to leaving.

Attributes and Usage of Various Bait Species

In my opinion, birds rather than rodents are far superior bait for all raptors. Lack of movement in a trap or in conjunction with nets is rarely a problem. With a modicum of effort, they are easy to acquire and not to difficult to keep.

English Sparrow: If I were restricted to one bait for all raptor species, it would be the English sparrow. In all the years of fixed-base trapping on Virginia's Eastern Shore, and some in the mountains with dho gazzas and bownets, and road-trapping primarily with bal chatris, I have caught nearly every species mentioned (except eagles) using sparrows as bait.

The English sparrow is very hardy, and easily caught and kept. I keep mine in a 2' x 2' hardware cloth cage completely covered with a white or yellow bed sheet that allows nothing but ambient light. Add perches, grit, food, fresh water, and disturb as little as possible. Using sparrows as lure birds and/or bait, I have had virtually every species come in aggressively and be caught. Exceptions which are more difficult, are the slow, quartering harriers which often seem to notice the nets and then try to walk in, and Coop's, which like to get behind your trap site and sneak in slowly, landing on the blind occasionally, and then try to grab the lure bird.

I have had a pair of mature Bald eagles stooping competitively at my sparrow lure behind a Merlin, dho gazza-set on the Eastern Shore. These birds would have destroyed my nets or worse, snagged a net and flown away with the 8 ounce drag weight to a probable bad end. After letting my lure bird escape to his hide, I ran out of the blind to scare them away, and although my trapping partner didn't believe me, I know I heard the tiercel say to the female "Bet you can't eat just one" The point being, sparrows are a great bait and appeal to all raptors! Placed in a roomy semi-cylinder or domed bal chatri (at least 10" high), three sparrows will bounce off the walls when dropped from your car. Immediately, here comes your 'Tail,' Kestrel, or Coop's, etc! Nothing seems to excite raptors more than a few sparrows panicked and contained.

English Sparrows have few drawbacks, but being so small they can be delicate if roughly handled. They must be fed and watered regularly and their quarters kept clean.

If used as a lure bird, treat them gently. I use a lure jacket cut from letter weight Tyvek downsized from a standard pigeon harness. The shape of an English Sparrow and a pigeon is remarkably similar, as are their flying abilities. For the harness, I prefer brighter colored tyvek, and I sew the sparrows into the jacket on the ventral side for a reasonably snug fit. I then locate the balance point of the harness on the sparrow's dorsal side, and either sew a strong, triple threaded loop or attach a small swivel just behind the balance point so that when dangling from a small swivel on the lure line, the head of the sparrow is pointed more downward than level, perhaps 15 to 20 degrees. In this way, one may merely raise the sparrow up, twitch him slightly and he will try to fly back down to the ground. When a raptor is approaching, drop the sparrow a few inches to a foot at a time with brief pauses . The lure bird, by this time is usually well aware of the approaching bird of prey, is panicked, and tries harder to get to its shelter.

I always provide my lure birds a place to hide (for sparrows, a tin can concealed with dirt with space dug out in front creating a path so as to create a mini "bomb shelter" with food and water beside it. For larger lure birds, a large coffee can is appropriate.) This shelter is a foot or so in front of the lure pole with the entrance facing the blind or the rear of the set, and lure birds find its location quickly. Another trick I use in luring to dho gazza nets is to place a small grass pile behind the sparrow shelter around the lure pole or a small piece of log (about an eight to ten inch diameter) between the pole and the lure bird's shelter.

As the raptor is closing on the nets, the lure bird is finally dropped in increments to just above this obstacle. Keep the lure bird just above the obstacle, drop behind it, then come back above. The hawk will now double its efforts to get to the lure bird soon before it "escapes". A raptor lured thusly, rarely if ever, will flare at the nets. This bird will be caught!

If one is using a two-bird system with a bownet, and you want the hawk to switch-off to another bait, simply allow the lure bird to escape to its shelter and activate the second lure/bait. I employ this method with all lure birds from pigeon to sparrow.

Note: jerking lure birds wildly all over the place does not increase the number of raptors one attracts. It simply wears out the lure birds faster, and they perform worse each time they are used. Think of a surface fishing lure or a fly. Except with certain species of fish in specialized situations, the "twitch" always beats the "jerk".

Nick Fox in his book <u>Understanding the Bird of</u> <u>Prey.</u> points put the much faster Flicker Fusion Frequency of Raptors. (FFF) This is simply the number of images a species can see and respond to in a given period of time. Humans can only process about 20 images per second while raptors are able to process 70 to 80 or more images per second. They don't need as long as we do to figure out, a prey subject is behaving unnaturally ie. it is crippled or otherwise in trouble. One quick unnatural twitch, and they are on their way to an "easy" meal.

Pigeon: in my opinion, the second best bait available. All raptors love to eat them, but they are sometimes too big for a smaller or less hungry

predators. They are very strong, and very tough, so we commonly used them as lure birds before switching off to starlings, dove, sparrows, or parakeets. Pigeons are very versatile. Often employed with noose harnesses, they work well as bait in cage traps, and of course, with bownets. As previously mentioned the only disadvantage of pigeons is their size. Some smaller raptors hesitate to bind to the larger pigeons, but this is easily cured. Smaller pigeon breeds exist. The Portuguese Tumbler and the Valencian Figurosa are two breeds which are about the size of a Robin. There are other breeds and sizes between these breeds and large homers.

If you can afford them, Diamond Doves aren't much bigger than a sparrow. One could easily bring in a kestrel with these little guys. If one is only interested in larger raptors, the pigeon is the way to go, but as mentioned before, larger raptors really love smaller bait too! Rodents are great baits for buteos, Kestrels, and Cooper's hawks. They come in a variety of sizes from mice on up. The size of the raptor to be trapped usually determines the size of the rodent used. I have, at one time or another, used most of them. (never tried a Capybara though, due to the paucity of sightings of Harpy Eagles in our Central Atlantic States, and the difficulty in dropping or throwing an appropriately sized B.C.) Rodents seem to work best in a Bal chatri. I have never tried them with bownet or dho gazza.

Life Tip: When running (sneaking) at night in a Land Rover without lights, close to the ocean on the harder sand, returning from trapping in a less than legal area during the day, *don't be surprised* when a current and tide created sand-ledge of several feet causes the Land Rover to drop over it, crash, and bury its nose in the sand, so that you know instantly you're going to have to dig it out quickly during an incoming tide, and at the same time, the old, half-rotten pigeon crate piled on top in the far back ends up broken to pieces on the back of the front seat, and twenty- five or so pigeons are instantly allowed the freedom of the interior of the Land Rover to demonstrate their fertilizing talents, *if a profanity or two slips out.*

Fixed Station Trapping (Techniques apply to shore and ridge-trapping in the mountains)

I was jumping out of my skin. It was a blue cloudless morning in late September about ten A.M. Mark Schriver, Buzzy Budbong, and I had gone on

our annual trapping trip to the Eastern Shore of Virginia, and the Monarch Butterfly migration was in full swing. Nearly every time I caught movement out of the corner of my eye, I pulled the lure cord. I would have to change lure birds more frequently that morning.

It was always that way on the first day during the butterfly's passage. Eventually we would acclimate to the constant movement in the sky and look twice before wearing out our lure birds. We had set up four stations with dho gazzas, one set for each of us with lure birds, and I had placed an additional remote-set about a hundred and fifty yards out in the soybean field above the three foot plants. This remote L set consisted of a pair of dho gazzas which sat above the soybeans and was rigged to allow the individual nets to release from the poles, with the purse strings passing through rings at the top of the net poles. This slowed the bagged raptor, and then suspended him

close to the ground thus concealing the bagged bird in the thick vegetation.

If given a chance and enough time, other larger raptors will attack and kill a netted bird. A piece of orange highway tape was pulled to the top of the pole by the end of the purse string when a bird was captured. I could see the "capture signal" from my station in case I missed the incoming bird. I had rigged a 10" diameter by 15" tall hardware cloth cylinder containing two parakeets with 2 perches, one high and one low, to encourage movement. I suspended it by rubber bands to amplify any movement and hung it behind the **L** type set.

Initially we had erected Mark's more elaborate plywood blind at the south end of the field in front of a wooded finger which stretched from the bluff above the Chesapeake Bay almost halfway across the field. The long rectangular field was about 150 acres which ran parallel to the highway. We always trapped on the western side of the field so as not to be noticed by passing cars. Since we all had our own theories as to the best methods to catch the various raptors passing us, we always separated to run our own little stations, and Mark and I always wanted a fair amount of distance between Buzzy and us in case a game warden or another law enforcement person with a reasonable sense of smell were to check on Buzzy.

Mark liked a pigeon as a lure bird with a cage of parakeets behind his series of three eight foot tall, double-stacked 6' x4' dho gazzas. He argued that it allowed him to catch any birds approaching his bait which flared at the last moment. Frequently he employed a bownet behind his dho gazza nets as well.

I always felt: more net, more visibility and I preferred three smaller single nets (3'x4' or smaller) in a relaxed C shape diagonally-set from my portable

shield- type blind. I used English sparrows as lure birds and nothing else behind my nets.

To set my nets quickly, I made guides for the net poles from four and one half foot sections of black painted 1/2" PVC. 7/16" holes drilled at each end provided an exact template for the 3/8" rebar to be driven in the ground to support the 1/2" black electrical conduit net-poles.

Note: Never place your blind directly behind your nets. Incoming hawks can see the slightest movement through your view ports.

The birds coming south tended to arrive in somewhat of a pattern depending on the wind which changed occasionally. I liked being more mobile. I usually positioned myself on the western edge around the bluff that bordered the bay. When we had a westerly or south westerly wind hitting the bluff, various raptors (mostly Cooper's Hawks) would ride the upswell above the bluff. Buzzy lay upon a beach recliner covered in a leafy camo-blanket with a sort of hood and sunglasses with a single dho gazza net forty-five degrees to his front and side near the north end of the field, and spent a lot of time watching the Monarchs. He used a white dove for his lure bird. If the truth be told, we all usually caught about the same number of birds by the end of a trip.

Each of us used lure poles of eight to ten feet. Over the years we caught Sharp-shins, Cooper's, Merlins, and Redtails (very few Redtails however, as they tend to migrate through this area later from mid-October onward, but local Redtails were around). Depending on wind direction and strength, we also occasionally caught Peregrines. Marsh hawks, and Broadwings, usually on cloudy, windless days.

In the morning as the thermals came up, we would sometimes see hundreds and hundreds of Sharp-shins rising from the woodlots to our north, up

he trap.

to great heights, and moving off southward. At times with binoculars, one could see huge kettles of Broadwings passing at great heights, and on good days with binoculars, one could see all manner of raptors so high as to only appear as dots. The only bird I recall that we called down from great height was a Merlin which raced in from out of sight in the sky to a blind lure pull.

After ten o'clock that morning, most movement close to the ground had stopped, except for the attention stealing Monarchs. As most activity usually slowed between 10 a.m and 2 p.m, about 10:30, Buzzy and I walked over to Mark's blind to have some refreshment and discuss the morning activity.

"You quit too early", Mark said. "Did you forget the 11 o'clock Merlin?" Buzzy laughed. It is a hawk trapper's corollary of Murphy's Law that the longer one stays in his blind before a break, then takes his break, or is otherwise unprepared, the more raptors will appear.

We discussed the few birds we had seen or tried to lure that morning. Both Mark and I had seen a few Coop's, Sharpies, and Merlins, and Mark saw a Peregrine fly over Buzzy. None of the birds had responded to our lures. I had missed a hunting Merlin early that morning that zipped by about 30' off the deck as I was setting up my nets. Mark had caught a male Sharpy and Buzzy said the dragon flies were particularly large this year and were really iridescent !

"We need a cloudy day and a good Southeast wind." I said. "Might bring in some Peregrines; anything to keep them off the thermals and hold them here at the cape".

"We've got a cold front coming in from the north and they're predicting northwest winds tonight for the next few days. That always brings in the merlins.!" added Mark.

"You know it!" I said. "Just pray for more cloudy weather."

"After 4 they'll start coming down and need a meal before roosting", Buzzy commented. And we "unh huhed" in agreement.

The 11 o'clock Merlin never showed, so we took our nets from the poles to keep the very curious deer from getting in them, and left for a long lunch at a sea"food restaurant about 20 miles away which was located in the back of a local drugstore. The Crab Imperial was very good as usual!

After lunch, the weather remained clear and bright, so we drove over to the eastern side of the peninsula and watched with binoculars out over the extensive marshes toward the barrier islands to see if there was any movement. It was low tide. There was a sole peregrine in the distance flying purposefully over the marsh towards the East, and various wading birds around the marsh were looking for trapped fish, fiddler crabs, and other crustaceans. A Yellowcrowned Night Heron flew in and landed just below us at the edge of the marsh.

By 3: 30 we had returned and reset our nets. The rest of the afternoon was sluggish to say the least until after 5 o'clock. We had a brief flurry of movement. Mark caught a Coop's and two Sharpies, and I caught a nice hen Merlin. (I rarely activated my lure for Sharpies.) Buzzy captured a jack Merlin, and a Sharp-shin, and we all saw the local pair of eagles playing over the field. At dark we started removing the nets again for the night, and as I started toward my remote set, I saw a plastic piece of highway tape suddenly flutter. So I ran the next hundred yards to find yet another hen Merlin. It was so dark I hadn't even seen the Merlin come in. They often hunt late into the near dark and frequently migrate at night. At any rate, on the first day, we now had the two hen Merlins that Mark and I had planned to take. We still

had three more days to trap for bigger or better colored merlins, and also for scores and bragging rights re: whose system was best. (Mark had the best background for his nets (woods) and often won, but with two hen merlins already this trip, perhaps I wouldn't have to cut his nets or accidentally release his favorite lure bird.

LIFE TIP: *When* showing off the anatomical features of the nares of a very keen, imprint European Kestrel to some visitors, tourists, and a really cute co-worker prior to a flying demonstration, and your head is inches from the bird, *and* it suddenly bites your lower lip, seemingly permanently attached to it, causing sufficient discomfort so to cause you to drop the jesses and leash leaving the kestrel dangling, and blood is flowing quite freely; *rather* than doing your imitation of the Japanese Red-crowned Crane mating dance, *try to remember the falconer's version of the "vulcan death grip" and pray*!!

Attack Styles Considerations for Trapping and

Some Trap Considerations

After deciding which raptor you want to trap, consider the attack style of that species. Redtails, Goshawks, and Coopers hitting guarry, tend to either take it to the ground or hit it on the ground where, if necessary, a rough-and-tumble ensues. All the "bird hawks", short-wings and falcons, often take their quarry while flying. If the quarry is on the ground, Sharpies and Merlins often tend to attempt to "snatch and run." Peregrines often repeatedly stoop at birds on the ground in order to make them fly, making the peregrine vulnerable to a dho gazza. For all raptors, there are many variables, including time of day/year, wind and weather, the size and apparent vulnerability of the guarry, the degree of hunger of the raptor, and the previous success rates of the individual bird.

The Sharpies and Merlins like Prairie falcons tend to extend their feet a few feet prior to approaching a small grounded bird with the idea of "snatching and

continuing on" so the padam or phai trap is a favorite out west and works well here in the east too. A Peregrine , on the other hand, might get caught by the neck if it comes to close too this type of trap. Redtails and larger accipiters while attacking a bait bird in a padam can also be caught.

All birds of prey when diving at prey prefer to dive/ stoop into the wind or cross-wind. This gives them more control and maneuvering power. As falconers, we prefer to see the faster downwind stoop, but given a choice, the raptors will choose upwind or cross-wind and added control. This should be considered when setting everything from a trapping location, a B.C. to dho gazzas and a lure pole.

Most raptors from Redtails to short-wings to falcons are vulnerable to a harness system. Redtails and short winged hawks may wait until a harness bird is being dragged down by the drag line. But ever the opportunists, these birds are usually on their way to the bait before it grounds.

Peregrines are best caught with harness pigeons, starlings, etc. especially if the bait can be taken in the air, but as the old-style harnesses tend to interfere with the pigeon or other's flight, these baits are often brought to ground prematurely.

Eventually, if the Peregrine is hungry enough, it usually closes with the grounded bait.

Peregrines, like Redtails and other raptors, will turn over a dead pigeon to eat if the nooses fail to do their job. If this should happen, you might try what Ron Frye did once back in the sixties while beach trapping. Ron leaned out the door of the VW bug he and Tayloe Griffith were using, approached the bird slowly, and snagged the Peregrine with a landing net! Don't you love those naive tundra birds. Since the falcon had broken in, and if it had been bumped, Tayloe and Ron would have placed a noose carpet over the dead pigeon and hoped the falcon returned to the kill.

The Arab style noose harnesses don't interfere much with the harnessed bird's flight. But they also have the same problem of an absence of nooses on the bottom. If the proper nooses are added, this problem can somewhat be addressed and corrected. Small diameter (1") sized, stiff nylon nooses added to the leather or the strings on the bottom of a harness sometimes remain open or will pop open after a bait bird has been killed and turned over.

My favorite trap for all falcons except Kestrels is the dho gazza. The bal chatri works best for kestrels, but they can sometimes be caught in dho gazzas too. Dho gazzas are available from all of the falconry supply companies. These traps can also be made from old mist nets or cut from a very fine diameter thread gill nets (.20 mm or smaller). Nylon

he trap.

multifilament with 210/2 denier size thread seems to work best.

If one uses either of these netting materials, especially mist netting, it's a good idea to reinforce the edges with a stronger line such as one of the micro braids. This becomes important if one is trapping in a high wind, when the corners of your net must be tightly attached to the net poles. A dho Gazza should be tightly strung, but it should release smoothly and easily! Even light weight breaking strength netting like repurposed mist netting is effective on bigger birds because the perimeter absorbs the impact and the net strength and stretch is sufficient to entangle the raptor.

I have tried various types of release apparatus: clothes pins, paper clips, and a number of fishing release clips. None is really satisfactory. I have found the simplest method of attachment to the poles which always works is to add a 3 or 4" loop or single line of heavier braided dacron (30 lb or so) to the reinforced net corners, and tucking this loop under and through **rubber bands** tied onto the poles. This method is quickly adjustable with varying winds throughout the day. A loop twisted into a single line provides a bit more friction than a single line. Experiment!

The easy resetting dho gazza described by Will Shor in the December, 1992 "Hawk Chalk" when pulled tight by the purse strings is easily held and released by one rubber band. I have used this system, and it is extremely effective. The only drawback is that because the nets aren't easily detached it is necessary to store it by stretching it out on a sheet or blanket and rolling it and the sheet up with the poles to prevent tangles.

I cut "2 1/2" diameter office rubber bands, wrap them tightly three or so times, and tie a square knot. It helps to leave a separate short piece or loop of the

braided dacron under the band so when pulled, it facilitates getting the corner loop under the rubber band. After getting the net corner loop under the band, pull the separate piece of braided dacron around the pole so that it does not interfere with the corner loop's ability to be pulled out easily. Once under the rubber bands, pull the corner loops far enough to stretch out the net. In stronger winds, add another set of rubber bands. After a day in the sun, the rubber bands are sufficiently degraded by UV light to need replacing. A drag line and weight are mandatory! Some trappers do not, but I always use a purse string attached to the drag line; it provides surer catches and less chance of an attempted fly off. I always place my drag lines stretched out, oriented toward the anticipated approach of the incoming raptor. This causes a faster pursing effect with dho Gazza nets, and a faster noose-tightening effect with a padam.

I prefer bank sinkers as the weight on the end of my drag lines. I use 4 to 10 ounce sinkers and varying lengths of line depending on the application. Bank sinkers are shaped like very elongated tear drops so they provide weight but don't catch in the grass etc. and usually slide easily along the ground.

Although many people recommend a mesh size of three inches square (6 inch stretch), I prefer a smaller mesh size for my dho gazzas. I have watched male Sharpies and jack Merlins both fold up and pass through the larger meshes especially on nets set with a poor background.

In addition, it seems the larger the mesh is in proportion to the bird caught, the more tangled your quarry will be at capture and much more time (and stress on your hawk) is needed to remove the bird from the net. My preference is for a mesh size which will allow the head of the hawk to pass through, but discourage wings (doesn't always work). A 1& 3/4" to 2 & 1/4" square mesh is my favorite. It seems to work well for Merlins to Redtails

Life Tip: *When* spelunking with another couple and using the old carbide lights and crawling in a line on all fours, boy girl, boy girl through a tight passage in front of a very lovely first time caver, who you'd really like to impress with your skill, knowledge, prowess, and bravery, and if she's following too closely behind you with her white-hot acetylene, torch-like flame on the front of her hard hat to illuminate her path; *don't* stop suddenly!

The Mechanics of Nooses

Years ago I learned from some young Bahamian boys how to catch Anoles. As a boy, I usually used my hands to try to catch skinks and swifts, often ending up with a twitching piece of tail in my palm but more often nothing. These young men would strip a fine strand from the base of the grass blade almost to the tip from a long piece of "marsh-like" grass, (probably a sedge) and form a noose on the end. The Anoles would sit perfectly still while the noose was slipped over their heads until the sudden upward jerk and the lizard was caught, tail intact. To mimic this, when I returned home, I hung light monofilament fishing line nooses from the front half of my fishing rod and every lizard I encountered was mine!

Every small animal and most birds are accustomed to grass and small sticks brushing against their bodies, legs, and feet. Ie. they pay no attention to light nooses. This is especially true of raptors trying to bind with their dinner! The nooses must only be designed so that the target species will easily entangle himself. The proper material of the noose, the orientation and location, the size of the noose, the correct attachment method, how and why the raptor snares himself are some of the considerations one must decide upon before making the trap.

There are three different types of nooses I prefer. All have multiple uses. I do not use nor recommend slip-knot locking nooses! If a caught hawk were to break the standing line and escape with a locking

noose attached, the eventual result could be necrotic tissue, an infected toe or foot, and worse. The key to the proper functioning of the average monofilament noose is the appropriate stiffness and the correct size terminal loop. Stiffer monos require smaller terminal loops so as to not interfere with the final tightening (1/32 to 1/16" is good). Large <u>very</u> limp mono terminal loops (up to 1/4") will wrap around a toe or leg and can function almost as well. In general, with monofilament, stick to smaller terminal loops.

The most common nooses in use today are the nylon-coated braided steel nooses. The commercial pre-made ones are the most quickly attached and are highly effective, especially for larger birds. They are very stiff and stand erect on their own, holding their shape well. They are made from one of the fishing leaders used for "toothy" fish. (Although larger Bluefish can bite right through them! Use single strand monel wire for those guys.)

The Berkley brand of nylon-coated braided steel leader is called "Steelon" (other brands are available), and is available in numerous pound-breaking strengths. To make them into nooses and attach them, one uses sleeves which are crimped on with pliers or a crimping tool. The terminal loop is small, around 1/32". The crimp that forms the terminal loop is bent in an L shape with fine needle-nose pliers so when threaded from below with the standing line to form the "catching" noose it allows the noose to be easily closed but resistant to opening. Some falconers vary the angle of the L bend for different uses. These nooses can be used with bal chatris. padams, noose jackets, etc.

My favorite noose material is made from a stiff pure nylon fishing leader or fluorocarbon leader material. Both are a smaller diameter than the coated wire types of equal breaking strength. Fluorocarbon is the smaller diameter of the two and has less stretch. Both have good memory are stiff and hold a noose circle easily. Pure nylon can be easily dyed, and if properly tied, works well. All nylon lines are a combination of various types of nylon blended and extruded to a monofilament. Some are stiffer than others.

Nylon (nets or monofilament) is easily dyed any color you want. Nylon absorbs water, fluorocarbon does not. To my knowledge fluorocarbon cannot be dyed. To dye nylon, use Rit brand <u>Synthetic</u> dye. To make black, (Rit doesn't offer black in their synthetic dye) mix 1/2 part graphite color to 1 part chocolate brown. Follow directions and wear rubber gloves.

To tie a terminal loop in monofilament line, double a few inches of the line and tie a loose overhand knot, place the terminal loop over a mandril, (a straightened large paper clip or a larger wire, up to 1/ 16". I prefer coat hanger wire, and one should gently but firmly, pull the two ends so that the terminal loop snugs down to the mandril size. Then, pull a little harder to really tighten the knot. When you slide the terminal loop from the mandril, (It is usually necessary to file the down the end of the piece of coat hanger wire, large paper clip, or other to easily slide the terminal nooses off.) you will notice that the knot and terminal loop have taken a cant to one side. This duplicates the L shape in the wire noose crimp, and if threaded from underneath to form the noose, it will allow the noose to close easily and resist opening. Then trim the tag end of the knot.

Stiff nylon (as well as other types of monofilament) is easy to set into a more permanent fixed shape. Simply tighten around an appropriate sized mandril, for instance, a "2" piece of steel pipe, suspend it in a bowl, and pour almost boiling water over it, and allow to sit submerged for five minutes. I usually tie fifty or so terminal loops on a piece of coat hanger wire with at least a twelve to fifteen inch standing line, form the nooses, place a six inch piece of 1 1/2 " or "2" steel pipe in all of the nooses, gather the ends of the standing line, and tie an overhand knot to a piece of coat hanger and suspend the pipe and nooses into a pot and pour in my hot water.

To attach monofilament nooses to your trap or harness, I prefer an improved clinch knot with at least 6 wraps, plus a drop of crazy glue to make it stand at the appropriate angle to the trap. The improved clinch knot forms a vertical column around the base of the standing line which holds the noose perpendicular to its attachment point. The glue simply holds the direction of the ninety degree angle from the hardware cloth. The nooses should be attached at cross-joints on hardware cloth. It helps to wrap the standing line around the joint twice before you tie the improved clinch knot. I use ten to twenty

pound nylon or fluorocarbon for nearly everything except Kestrels (5lb for these teenies). Ten or twenty pound stiff nylon is available from Memphis Net and Supply. Most of the bigger line manufacturers (Berkley, Stren, etc.) market fluorocarbon leader material. It comes in clear or with a blue tint. As mentioned before, the stiffness of both of these and the nylon coated steel nooses is sometimes effective when placed on the belly side of a harness. Some seem to spring back into a large enough noose to catch a Peregrine or Redtail which has flipped the bait bird to eat it. If these birds are not caught, the best alternative is to wait until the hawk has well broken in, carefully and gently bump the bird (don't terrify it!), and if possible, block the vision of the raptor with the car, and put a noose carpet with a drag over the dead pigeon. Then, pull away to a distance to watch, and hope your hawk returns.

There other monofilaments which work as well for nooses. However, many are too limp to stand erect for long and end up flat on the B.C., making them ineffectual. Experiment to find appropriate monofilaments.

There is one other type of line that seems to work well, which is Berkley's Fireline. It is one of the micro braids but is stiffer than other brands and has stronger memory retention . Fireline, like all micro braids, is very slippery, so I would advise a drop of crazy glue to ensure knots will hold. Due to its extrafine diameter it is probably a good idea to leave a 1/2" tag on the terminal loop knot to facilitate removal from a trapped bird. It should be excellent for stand-off, clover leaf nooses on bal chatris.

Noose carpets are simply nooses attached to a fixed base, usually a wire mesh or even a board. Any bird of prey walking around one of these surfaces will probably be caught. As mentioned above, they can be used to cover dead bait after the hawk or falcon is bumped, be the top of a cage containing bait, i.e. a B.C., to cover a pole trap (square, round, or T-perch type), or even be modified to work as a type of padam trap. Noose carpets can also serve as an alternative to a bownet, i.e. a place to drag a captured bait or lure bird on a string. In all of it's many uses a noose carpet must either be attached or have a drag system.

In most instances, I prefer using chicken wire as my "carpet" base due to its flexibility and the greater visibility of the bait beneath it. If used to cover a dead bait after a raptor has been bumped, it is also a good idea to pull a wing and the head through the mesh to make the dead bait more appealing. I usually spray paint the chicken wire black. I feel a drag line with sufficient weight is superior to a fixed carpet.

The third type of noose is the one employed in the Middle East and Asia. It uses light braided mono for the "standing line" for stiffness and a number of limp but strong cotton button-hole threads to form the terminal loop. Directions for making these nooses is available on YouTube from the Middle East and Southeast Asia (Cambodia I believe). Check out all the bird trapping videos from this part of the world for ideas and entertainment. The principle of a stiff standing line with a soft terminal loop can be exploited in several ways. The larger teminal loop (1/2 to 5/8 inch) is needed to easily slide over the roughened surface of the braided standing line, and because it is soft, it easily functions as part of a strong tightening noose which doesn't easily release. It is easy to make by using a stiff standing line such as coated wire or nylon. Use button hole thread, limp mono, braided dacron (of the appropriate poundage) or dental floss. With floss, test breaking strength by bouncing weights to determine number of strands necessary. I use waxed, but I'm not sure it matters.

To attach, I first touch the tip of my nylon line quickly to a hot stovetop burner to form a slight bump on the end of the line. The limp terminal loop is attached using a "FG" type knot (preferred). This type of knot tightens when stressed, and the bump helps prevent any separation. As extra insurance, I add a drop of one of our modern bailing-wire fixes, crazy glue. This type of noose has been highly effective for centuries. YouTube directions for these connecting-type knots are available on the internet. Remember the softer loop line must be doubled to tie this and some experimentation is needed to end up with the correct size terminal loop.

One of the reasons nooses break is because, after tightening on the hawk's foot or toe, there is too much standing line from say a, bal chatri, to the hawk. A big Redtail can bounce, drag the trap, and really fight the noose. A shorter standing-line on the noose is more likely to cause the bird to flop over.

Another situation to avoid is too many nooses, especially limp mono. Being limp, they lean and often interfere with one another and/or lie down flat on the B.C. For these reasons, I prefer fewer, smaller diameter nooses, of one to two inches made from stiffer material. Nooses may touch each other, but not overlap. An active bait will cause the raptor to move around the B.C. thus insuring a catch.

Life Tip: Life Tip: *When* many miles from a hospital and dropping a 2 pound bal chatri in front of a Kestrel by hand from a vehicle moving at 5 to ten miles per hour on a rough, bouncy shoulder, *don't use a very, very short jerry-rigged release handle!* More on Traps and Nets and My Personal Preferences

One of the earliest bal chatris was little more than a framework dome placed over a pegged-out bait. Three or four strips of wood or bamboo splits were bent over one another to form the dome. The distance between struts was set so as to encourage the raptor to reach through them to grab the bait. Some nooses were set standing up on the struts, but

he trap.

the many were set parallel to the frame, with their openings spanning the gap between the struts. Any bird of prey attempting to reach through the struts would be quickly caught. This arrangement would seem to lend itself to a more limp type of noose or specifically using the Berkley Fireline.

The dome and semi-circle type of B.C. with all vertical nooses was introduced into this country around 1953 by Fran Hamerstrom. The design of the B.C. and noose-orientation began to change when multiple catches with the same bait and portability became more important.

One can still protect the bait on a "reach through" design with an inside smaller bait cage. Leave a 3" space between the bait cage and your noose scaffold. This type of trap could be modified to replace noose carpet over a previously killed bait, and probably would be more effective. Use a drag weight.

The bal chatri, both old and new, is one of the most effective hawk traps ever designed. Most of the falconers in this country caught their first bird with a B.C. There are hundreds of designs for them. Almost all will work, but my favorite is simple-to-build, has enough weight to discourage dragging, and allows for various types of baits. It cannot be thrown from a vehicle, but a simple release pole can be made to drop it from the car window or, with a seat belt on, it can be dropped by hand from an open front door. Don't slam the door! Its greatest advantage is, due to it's size, it can most effectively house and display a variety of baits. The disadvantage is the difficulty in placement on a short-shouldered roadway. It is a simple semi-cylinder over a rectangular piece of wood. I like a 1/2" hardware cloth semi-cylinder, painted black and attached to a 15"X12" inch piece of 2"x12" or 1/2 inch plywood with added weight. The ends should be bowed out, as square corners

encourage the bait to crouch there. Round bait cages encourage continued movement.

A sheet of 1/16 lead may be attached to the bottom for weight, reducing sliding, and to deaden the sound upon dropping, The interior surface of the board should be painted a dull light earthy color (not white) to make the bait highly visible. If using Starlings for bait, employ a double dome. These guys will pull a noose inside and hang themselves in a heartbeat. This double wire wall is also imperative if there are shrikes in your trapping area. Shrikes, walking around your trap, will strike through a single mesh, blind, and then kill your bait. If you want to catch the shrikes, add a flat apron to your B.C. with 3/4" light weight five pound nooses. (Note: Shrikes are a protected species, so unless you have a banding or scientific permit, better leave them alone and use the double mesh and no apron.)

he trap.

If one is only interested in trapping Redtails and using small rodents as bait, any of the flat, shallow designs will work, but at least make them round to encourage more continuous movement of the bait. Other designs are available commercially, but most aren't spacious enough to employ sparrows as effective baits. My preferred type of B.C. is heavy and requires a release pole to get it farther from the car on the shoulder and to prevent the two hundred and forty two B.C.s (at least) I've clipped or run over in my life. I like a short piece of coat hanger wire attached to the balance point on top of the trap with a bend or loop at the top **above the nooses**, which my release pole can be detached from easily. The release pole shown in the illustrations works well.

I believe the ultimate bal chatri for Cooper's hawks may be the ancient design which encourages the hawk to reach through the dome struts to grab the bait. The flat, gap-spanning nooses will quickly capture any bird which attempts this. Vertical clover leaf-design nooses should be used on the struts for any hawk attempting to land on the trap. I have included a simple design.

In addition to the B.C., a pole trap set next to the bal chatri, is often helpful. When I was young, the pole trap was simply a steel trap on a pole. This was prior to the protection of raptors. Now it consists of a pole with a small platform festooned with nooses. Instead of a platform, I prefer a twenty inch cross bar made from a three inch diameter piece of limb. (There is always a good one out in the firewood stack.)

If you are familiar with the mistake often made by a beginning falconer's use of a fence rail when calling-off, then you will understand why a limb is superior to a small platform.

When calling-off a bird in training, and a fence rail is used in place of a post as a perch, the hawk in his insecurity over coming to you will, of course, run up and down the rail and condition himself to be less than instant in his response. The same is true of a bird perched over a B.C., especially if he has already been momentarily caught by a noose. A 20" limb if set at a slight angle to the B.C. will encourage movement, and and offers a greater chance of your hawk being snagged. There are many uses for this type of pole trap: around pigeon coops, game farm flight pens, and near other types of traps.

Padam or Phai Trap

The padam trap is primarily used to trap raptors which attempt to snatch small prey from the ground without stopping. The padam consists of a circle of larger vertical nooses around a pegged down bait bird. The nooses are either fixed to a very lightweight circular frame or designed to pull out and are tied together on one line. A drag line is used to slow and arrest the rig. This will work for any raptor extending its feet just prior to grabbing the grounded quarry. The toes, feet, and/or legs will go through the nooses, tighten, and with the resistance, the tear away design of the trap and drag line, the nooses will tighten, and the raptor will be gently brought to ground.

I prefer three to four inch nooses on a light circular frame made of one or two rows of rubbercoated hardware cloth or a piece of TV antenna (300 ohm, double wire). The frame is wired in a sixteen to twenty two inch circle depending on the size of the bait.

The individual nooses are tied to the frame and situated parallel to the circle, in essence creating a noose "fence" around the bait bird. They are set so the nooses just touch each other. A bird of prey approaching the bait will hit this "fence". The bait bird(s) should not be able to touch the nooses, but the nooses must be close enough to the bait as to ensure the hawk's feet and legs are extended.

Again there are many variations of this trap. Some of the oldest include goose quills tied together while supporting the nooses. (stripped pigeon tail feathers will work) The quills are stuck in the ground allowing them all to pull out when just one noose is activated. Most of the newer models are of the lightweight base style. All of the falconry supply companies sell them. even in a wind

Bownet: one of the most ancient designs, even appearing on scrolls in ancient Egypt, is still great, though to my mind a bit tedious.

Bownets should be have a minimum of a four and one half foot diameter for most raptors and springs powerful enough to carry the net over the hawk very quickly even in a wind. I employ the Will Shore design as shown in the "Hawk Chalk" August 1990. It employs four springs each with forty two inch/pound

he trap.

strength. It is very fast and uses #9 weight netting with a one inch mesh. Larger mesh can allow more tangling with smaller raptors.

Most trappers employ a lure bird on a continuous loop which can be dragged to the center of the bownet. I prefer a separate line to the bownet as I get a more responsive lure line. I use a piece of opaque cloth over the tied-down bait bird in the "catchingarea" of the bownet. A line to the piece of cloth allows one to expose the bait as the lure bird seeks shelter. The bownet is fired by a separate line from the blind or by an electronic remote once the raptor is in the proper position.

This set-up is often used in conjunction with dho gazzas. The bownet is a highly effective trap which has stayed around not just because of tradition but because it works! I would not encourage self-firing models unless they are huge in relation to the raptor being trapped. Imagine a quick short-wing or a

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"snatch and run" species hitting the bait and quickly leaving! Mouse trap!

Dho Gazza and Sets

The dho gazza is an excellent trap and my favorite; it will capture all species of raptors of interest to falconers. There is nothing more exciting than luring a bird of prey seen only with binoculars from the sky and watching it hit your net!

The dho gazza is simply a very low visibility vertical or slightly angled net which disengages from its support poles and entraps an attacking raptor. Unlike the mist net which remains attached to the net poles, and stops a bird very quickly, causing the bird to tumble down the net into "bags" to be trapped, a dho gazza net easily tears away from the poles, slows the raptor, and collapses around the hawk.

Mist nets can be the least effective method of capturing hawks and falcons. When the wind is blowing, the large "bags" in mist nets are easily visible, and the slightest breeze makes them billow and flap. Banders and other scientific permitted people seem to use mist nets effectively by setting them in various L or semi-circle patterns and/or having multiple nets set in a variety of patterns. (See <u>Bird Trapping & Bird Banding</u> by Hans Bub for more information on this type of trapping.) Remember mist nets are illegal unless one posses a bander's or a scientific permit!

Dho gazza nets however, when cut from old mist nets, and reoriented in a square (rather than diamond shape) with the appropriately-sized hole to the approaching raptor, if stretched tightly in front of a suitable background, are almost invisible.

If not using repurposed mist netting, I use multifilament gill netting, but multifilament nylon gill netting that uses a fine enough thread is getting harder and harder to find. For raptors the twine diameter should be around .20 mm thick. Duluth Net in Duluth, Minn. {(800) 372-1142} still sells 210/2 thread size in multifilament gill netting (about .23 mm). It is of course white and requires dying. They also sell .20 mm nylon monofilament gill netting in various sizes. This pure nylon (fishing line) is shiny even when dyed but should work well in low light. (Duluth Net will also make custom dho gazzas for you to your specifications. Ask for Bruce; he has done some trapping and understands what is needed.) Use RIT Synthetic dye, one part chocolate brown with 1/2 parts graphite seems to be pretty close to black. If you cannot get old mist netting of the proper mesh size or gill netting made of a fine enough thread, buy the ready made dho gazza nets from the falconry supply companies. Or, if you have the patience of a saint, tie your own. Material and easy instructions are available from the various netting companies.

The size of dho gazza nets is dictated by personal preference. I've always felt the nets should not be wider than double the wingspan of the bird you want to catch and a bit shorter in depth. Larger nets can be more affected by wind and thus more easily seen. In addition, smaller nets release more easily and cleanly from their supporting poles. The nets I prefer are usually 3'x4' or slightly smaller, and I like a smaller mesh size, around 2" square. I always have a purse string attached to a drag weight on a four to six foot line.

If using old sections of mist net, reinforce the edges and corners with stronger line. I use one of the micro braid lines. This takes most of the pressure off the light weight thread in the net as the much stronger reinforcing line receives the impact of the raptor strike. I use an additional piece of micro braid for the purse string.

For the basic set up, stretch out your reinforced net and start the purse string (purse string should be 2 1/2 feet longer than the perimeter of the net). Thread the string through the middle mesh of the top of the net, then through the left or right top corner, then once through the middle of that side, followed by the bottom corner, and ending through the bottom middle mesh. Pull 18" excess string out, then repeat in reverse from the top the other half of the net and tie the ends of the purse string together. The drag line is clipped with a swivel to the knotted point on the purse string. The drag line and weight are stretched out in front of the net, facing the incoming raptor, so the pursing action begins as soon as a bird hits the net. The purse string passes through the meshes only 8 times to reduce friction yet still create a complete bag.

Working with light dho gazza netting can cause one to reach for the tylenol bottle quickly! To cut dho gazzas out of larger mist nets or gill nets, one must first spread them out. If allowed to touch the ground, the netting acts as if it has glue on it and will grab every leaf particle, stick, piece of grass, or other debris and refuse to release it. Shaking doesn't work! Nearly every piece must be taken off by hand.

To avoid some of these problems, I hang my bulk netting on the side of my house (It helps to have a pale yellow wooden house so I can see the meshes, otherwise one can tack up light colored sheets of paper or bed sheets.) or stretch sections over a smooth sheet of 4'X"8" plywood placed on sawhorses. Using tacks or nails allows me to orient my dho gazza to a square face mesh rather than the diamond shape on mist nets or gill nets. After cutting, I gather the four corners of my nets, push the bulk of the dho gazza into a plastic baggie, seal it, leaving the corners protruding, and label the baggie as to size and netting type until adding

reinforcement, 4"corner tag lines (to tuck under the rubber bands on the poles), and purse strings. This also seems to be the best way to store a finished net. The four corner tag lines are gathered with the end of the purse string and left outside on the exterior corner of sealable baggie while stuffing the netting is inside. Sealed up to the corner these flat and light weight packets, spare nets can be carried in one's breast pocket and are quickly available to replace a net with an entangled raptor inside.

Dho gazzas require a brushy background to help obscure them and are routinely set in a series such as a two-net set in a loose V or L shape. I like a three-net set in the shape of a wide-sided C. They are often set in conjunction with a bownet to the side or behind the set. It is a good idea to have extra nets ready to be set up if it will take awhile to untangle your freshly caught bird. The simplest and cheapest lure poles and dho gazza poles are made from metal electric conduit poles, cut to the appropriate length. I use 1/2" conduit for my net poles and 3/4" for my lure pole. The poles should be spray-painted black or brown. I put an eye bolt at the top of the lure pole to attach the lure line.

To set up these poles, simply drive a slightly sharpened four-foot-long piece of rebar into the ground about a foot deep (depending on the ground) and slide the conduit over it. The rebar diameter should be just smaller (as close as possible) than the inside diameter of the conduit. Repeatedly driving the rebar with a sledge hammer can cause the top to splay thereby preventing the conduit from sliding over it. Either have spare rebar stakes or find a "drivercap" that prevents the splaying. I use a 45 oz dead blow hammer that is soft enough so as not splay the ends of the rebar. The rebar, conduit, and dead blow

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Don't Slam the ghDoor

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hammers are available from Lowes, Home Depot, etc.

If you are going to set up on sand or on very soft ground, use a longer piece of conduit pipe, and simply cut the end of the conduit at an angle and drive it in. Remember to clean out the sand and dirt which has accumulated in the conduit immediately after trapping, or it will solidify into a concrete-like plug requiring atomic explosives to remove.

Tanglefoot Teepee

Next I want to describe a trap that I have never used. It is based on the traps made with birdlime in the older British hawking books and from the methods used in India and Asia. Our modern equivalent of birdlime is a product sold as Tanglefoot (brand name). It is used now primarily for insect control and works well. (It is the substance used on fly-paper.) I have used it to keep ants out of my hummingbird feeder by putting it at the base of the Dogwood limb the ants were following out to my feeder; it worked great! As a hawk trapping device, I know of only one successful use in this country and it occurred when I was only about 14 or 15.

My friend and fellow falconer Tayloe Griffith (same age) caught a mature Redtail with a tanglefoot teepee. The old literature describe this trap, and it should work for a variety of species although it has the potential to be really messy. Tayloe's description of his trap and catch is as follows. He first collected about 18 strands of black braided dacron fishing line (called squidding line back then) and tied them together at one end. The strands were around 6' long from their connection. He then applied the tanglefoot with his hands to each strand after warming it slightly on the stove. Then again, using his somewhat cleaned fingers, he removed as much of the tanglefoot as possible from each strand. Tayloe said

one should really squeeze the strand until the strand looks to be free of the sticky stuff. At this stage Taylor said that even a single wrap of the string cut into his skin if pulled so as to get it to slide around the arm. After preparing his string teepee and going to a field where a large Redtail frequently perched, around 500 yards away at the end of a field, he drove a long pole into the ground at a 45 degree angle. The strands were attached at their joined end to the upper end of the pole. Tayloe then pulled each of the strands out individually and with his finger pushed the ends an inch or so into the ground so as to anchor them. Within this teepee, Tayloe had staked "a half-grown, white chicken from home".

He turned and walked back to an old rusted piece of farm equipment around 100 yards away to watch and turned around. The old Redtail was already entangled! The pole was down. Taylor said he ran back, and the chicken was unharmed, the pole (drag)

was unnecessary as the Redtail had three strands wrapped around her body and couldn't open her wings. Interestingly, Tayloe reported that the strands came off easily when lifted vertically, and there was almost no residue. This story was confirmed by Ron Frye who arrived in time to see the mature hen released. Tayloe reiterated the necessity of removing as much of the tanglefoot from the strands before use as possible. It seems enough sticky stuff remains within the braiding of the strands. According to the manufacturer Tanglefoot can be removed from equipment with mineral spirits and from skin (and probably feathers) with baby oil or citrus cleaners followed by soap and water. If one considers the stress on a freshly trapped raptor, this method with the probable cleaning leaves a lot to be desired.

If one reads <u>Life with an Indian Prince</u> by Frank and John Craighead, from the American Falconry Archives one will learn a number of uses for bird lime as well as other old Indian trapping methods from baraks, to dho gazzas, and bal chatris (they used what appears to be braided-horsehair nooses). Head for the stables guys!

The best stand-alone traps seem to be the Swedish Goshawk trap, various forms of the box trap, and the hawk fired automatic bownet. These traps should **never** be left unattended! It is probably even better to have the release mechanism controlled by the trapper especially if the traps are not very large.

One major problem with box type trap designs whether clap-top or a funnel designs is the fact that they are boxes! It takes a wild raptor less than a split second to jam and partially trap their wings and/or tail into a corner! Why not make the traps round? Cylindrical soft netting traps are perhaps easier to make and can be completely portable.

The Cohasset Trap

Funnel traps for birds have been around as long as any. They have been used to trap everything from swans to sparrows with great success. The configuration location of the funnels, and size of these traps is the main variable. The trap described here will catch accipiters and buteos.

Imagine you are a Cooper's hawk or a Goshawk. It is an early, cool, November morning and you are slowly moving through the top of the canopy along the side of a ridge in the Blue Ridge Mountains heading South. There are no thermals yet, and you would like to get a meal before the thermals come up as you migrate south. You hear a distressed Flicker call from near the top of the ridge so you fly up to investigate. There near the edge of the tree line where an alpine meadow opens up, you see a six foot tall, cylinder covered in netting. In the bottom of this cylinder are several pigeons. You immediately fly at them, hitting the netting while the panicked pigeons

flutter around the three foot wide chamber.

Frustrated, you fly up into the nearest tree and turn back to the cylinder. The the pigeons are still there and the top appears open. There is a T perch a foot or two above the top of the cylinder so you fly over and look down. There is a net funnel going down into the cylinder with an opening about a foot wide. The now panicked pigeons are just below the opening so you dive through it. A human voice up the hill yells "Yes!"

This type of funnel trap is based on the Cohasset trap which is used in a small size for sparrows and other small birds and in a larger size for crows and other corvids. To make room for bait birds and create a larger more attractive chamber, I have simply shortened the length of the funnel.

To construct these traps, I use 36" or 30" galvanized, spring steel rings from Memphis Net with "1" square black or brown dyed seine netting (# 9

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weight) stretched around them. I use four rings for a 6' funnel type trap and a separate 36" or 30" ring with a 12" ring for the funnel entrance. Diurnal birds of prey cannot fly back up through a 12" circle. I make the 12" ring from 1/8" steel rod from one of the home fix-it superstores. You need four 36" pieces and one 48" piece. The circumference of a 12" circle is 37.7", hence the 48" piece. The small funnel ring should be secured 17" to 19" below the 36" or 30" with four 1/8" steel rod struts. For a 36" circle, the struts should be 21.63", the 30 inch circle strut length is 20.12". Fortunately I still remember how to find the square of the hypotenuse and have a calculator! solder/weld the struts from the inside of the large ring to the outside of the smaller ring. This helps the funnel section to lie flat against the top the cylinder. If you can't weld, find a shop that can. Machine/ welding shops also have tools that will bend your

37.7" piece into a perfect 12" circle. Call around.These shops vary in prices.

I found an excellent welder by asking the mechanic at a country auto repair shop. The man he suggested is half the price of other welders and a very fast worker!

These struts, and the smaller ring can also be made with easily hand-bent coat-hanger wire glued and/or lashed together, though mine look so crude I'd rather pay a welder for a sturdier one. The funnel section should be painted the same color as the netting and covered with the same 1" mesh, dyed seine netting as the rest of the trap. After set up of the cylinder, the funnel piece is placed on top/inside of the cylinder and secured with zip-ties.

The cylinder is created by securing the netting around four rings spaced two feet apart, one at the top, one at the bottom, and two in the middle, thus creating a collapsing six foot by 36" or 30" chamber.

This creates a lightweight, easily transported trap. To set up, the collapsing rings and netting are attached to and supported by three six foot externally situated pieces of 1/2 " electrical conduit and one taller seven and one half foot or so piece all painted the same color as the netting. The weight of the cylinder rings causes the netting to draw in and become convex between the rings, so simply pull it out and attach to the four external support poles with zip-ties. At least two of the support pole should be secured to the ground. Short rebar stakes driven in the ground to slide into the conduit will hold the trap in position.

Each six foot piece of conduit should have two holes drilled at the top 1/4 inches or so apart, then repeated two feet down, and two more at two feet from the bottom. The holes are for the six inch zip ties to attach to the rings of the net. The bottom of the net cylinder is left free so it can easily lifted, and the extra netting underneath which is with closed with a purse string can opened to extract captured birds and put and take the bait birds.

The holes on the 7 and 1/2 foot piece should start two feet from the bottom, go up two feet, then again at six feet, leaving one to two feet to stand proud above of the cylinder. The taller support rod is also used to support a T perch so that the hawk can look down into the funnel and see the pigeons. The poles only support the top three rings. The T- perch I use is simply a 15 "piece of firewood with an 18" piece of 3/8th inch threaded rod attached and slipped down into the top of the 7 1/2' pole. Some duct tape around the threaded rod just under and against the fire wood will allow a "jam" fit so the perch does not rotate.

The support poles should be secured to the ground and the trap placed within view of the trapper.

Add 3 or 4 pigeons. and there is no need to stir, just collect your bird after he goes inside.

If ridge trapping with dho gazzas and bownet, place one of these slightly within the woods but within eyesight as both Cooper's Hawks and Goshawks (where are those Red squirrels?) often seem seem to travel along or beneath the canopy while migrating.

Remote predator callers placed near this trap will bring birds into the trap. Distressed flicker and starling calls are effective for Coop's and Goshawks.

To target immatures of a particular species, play a brief immature food begging call of the raptor of interest, then a brief prey distress call, and stop for at least twenty minutes. Ridge trapping in the west has shown this to be highly effective on immature goshawks up to five months after fledging. They use a rabbit distress after the goshawk call. This system in conjunction with bownets, dho gazzas, etc. at the top of the ridge will catch more birds.

When making one of these cylinders, go ahead and make three, leaving enough netting at the bottom of them to seal one end with a purse cord. By joining two of these together, you now have a 12' fyke type cage to place under a large dho gazza for a separate trap.

Clap-Top Traps

I like three rings for a 42" tall "clap top" type design. For a less portable type enclosure design, drill 1/4" holes in four forty two inch long, 1/2" electrical conduit pipe and thread the rings through the holes at the top, bottom, and the middle section. Paint the rings and poles black or brown then cover with netting, This trap must be pegged down at the bottom ring. I prefer the top of the trap to be made on a separate ring that is zip-tied to the top ring of the cylinder. For the top of the 42' tall cylinder, I prefer a 36" bownet, but a square type may be constructed of wood or metal as long as it covers the 36" diameter of the the cylinder. I make a 30" wide by !0" tall bait chamber with it's top covered with clear heavy monofilament gill netting; chicken wire for sides and bottom. This will slip into the 36" trap easily and leave a 32" by 36" round chamber to completely enclose the trapped raptor. Cylinder or box type traps <u>must</u> be made so the raptor is inside and well underneath the top clap-top net, so it cannot touch the hawk upon closing.

To make these traps portable simply omit the fixed vertical poles. Use instead four exterior poles of the appropriate height held in place by rebar posts driven in the ground just beyond the 36" diameter of your trap. Attach the rings to the vertical posts at the correct height with zip-ties. It helps to drill holes in the conduit at the height of the rings to attach the

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zip-ties. After being taken down, these net sided cylinders collapse and depending on the trap, one only has one or two other pieces (funnel top or bownet and bait cage) which, with the collapsed cylinder will thread on the conduit poles and be easily carried.

Triggers for various cylinder shaped clap-top traps can be simply made by using a string stretched just above the bait cage, and attached to a rat trap. (Remove one spring as two springs on a rat trap are too powerful.) The rat trap is mounted near the bottom of the cylinder on the outside, the trigger line is stretched across the cage area two inches over the bait cage and attached to the rat trap trigger. When sprung, the bar on the rat trap pulls the line which pulls the pin which holds the spring loaded top or bownet, allowing the top to snap shut. I use a 1/2" piece of PVC pipe to run the 60 pound plus line up to the trigger for the bownet. Pipe "stand-offs" will hold

the PVC in the correct position from the cylinder strut. I prefer one-spring rat traps mounted upside down as the thicker, heavier wood in the rat trap is easier to work with.

If you are really clever perhaps you could figure a way to use an opaque top and a black skirt around the top of the trap which drops when the clap-top is triggered thus becoming, in essence, a giant hood. I want to see this Rube Goldberg rig in action!

As mentioned above, some hawk triggered traps can be dangerous. I know of one goshawk that had a wing broken by a hawk triggered type of vertical bownet.

The brarak is an ancient method whereby a smaller or weaker bird of prey is released on very open ground with a weighted ball of feathers with many nooses attached. It is tied to the feet or dangled just below the feet of the barak bird. The often pinioned barak bird (first three or so primaries are tied together) is supposed to only be able to fly about 200 yards. This situation brings out the pirate instinct in the target raptor, and its feet are caught in the nooses in the air or on the ground by the weighted noose ball. Although it supposedly rarely happens, the barak bird can be injured or killed. Aside from modern European and American falconer's sensibilities, it isn't legal here. (In addition, my local Lugger's union has contacted me and refuses to participate) Life Tips: When your lady friend must fly to California for a updating publishing conference, and calls you to persuade you into keeping her noisy and nasty, oneeyed, ripped ear, squirrel killing, yellow, bloodmatted, long-haired, old tom cat that should have at least been named "Captain Jack", "Patch-eye", or "Killer" and has already bitten you twice, and you've not noticed nor found the banana peel that must have crawled on its own behind the red coffee maker next to your sink in your less than hygienic kitchen, and you have an explosion of fruit flies that keep committing suicide by diving into your food, fruit drinks, and coffee, so you are forced to hang two strips of flypaper from the shelf above your sink that reach almost into the the bulging pile of dirty dishes in the basin; and if you have an aversion to going to the emergency room after being awakened at 3 a.m. to a cacophonous sound almost more horrifying than

More Notes on Baits, Acquiring, and using it.

Mice: Mice, gerbils, and hamsters from the pet store have the advantage of being readily available and they (mice) come in different colors. The disadvantage is they don't work at all well in cooler weather. This could possibly be altered by keeping their cages outdoors. The gerbil and the hamsters former wild stock certainly had to deal with colder weather. I always preferred wild caught mice, the European house-mouse. In Virginia, our native Deer Mouse is protected.

Wild mice are easily trapped using small (about 8" long) Havahart traps or other multiple-catch live traps available commercially. I've frequently used homemade tin can traps. These are made by wiring together a longer type can (soup cans are a good option or frozen orange juice cans) and a wood base "snap" type mouse trap. The mouse trap needs a piece of hardware cloth slightly larger than the can entrance wired to the snap bar. The hardware cloth door is split down the middle to allow the trip bar to reach the trigger. (see illustration) I used to make a enough of these to run a small trap-line to provide occasional natural food for some of the birds of prey that I've kept. All live traps should be checked at least twice a day. If housed together, the European House mouse will kill and sometimes eat the Deer Mouse.

English sparrows, starlings, and pigeons: (nonprotected species)

English sparrows are not protected and are easy to acquire and keep for several weeks. Three or so birds in a larger BC such as a larger semi-cylinder or a tall dome type will frantically fly all over the space available to them. A single bird will sometimes settle down quickly, but multiple sparrows (or starlings) seem to agitate each other. (Don't you love the term "allelomimetic behavior". Makes me want to take up poetry again. Why couldn't the scientists have simply said "flock behavior" or "copycat behavior" or even "monkey see......"?)

Trapping either English sparrows or starlings is very easy at a feeding station as around home bird feeders in the city, the dumpsters at fast food restaurants, or at feed stores, livestock feed lots, etc.

Traps for sparrows include commercial ones, and easily home made funnel types.. I prefer larger funnel traps because one can catch twenty or thirty in one afternoon. Tip: always leave at least one "judas" bird in the trap to bring in others. The best baits for these sparrow/starling traps are breadcrumbs (the commercial ones used to coat frying foods are fine, or smaller pieces of regular bread), bird seed, cracked corn, or even french fries when trapping around the dumpsters at McDonalds. You should spread some food at the entrance of your trap with a larger amount visible inside. My friend Nelson Lewis used to use a large wire portable dog kennel when trapping starlings at a fast-food restaurant's dumpster. A string to his car operated the door on the kennel. He said it worked best in the snow, and I believe he used snack bags of popcorn for bait.

To keep English sparrows place them in a larger hardware size cage in a quiet room and cover their cage with a white or yellow sheet so as to only allow filtered, ambient light inside their cage. Since I have a bird dog, I keep mine in a bathroom in the shower stall. (easier clean-up) Do you suspect I'm not married? I keep the door to the bathroom closed and the lights on during normal daylight hours. I provide perches, plenty of food: bird seed, grit (chick starter), and fresh water once a day. If I find a dead bird in the cage, I remove it and dispose of it. Twenty or so birds will do well for up to two or three weeks (as long as I've been able to tolerate them in my shower or before I went trapping). There have always been two or three deaths over the time frame. Left alone, the vast majority seem to stay healthy.

Starlings kept this way don't do this well. Without rather labor intensive methods and complicated housing requirements, they are difficult to keep. Their seemingly hyper-accelerated digestive systems must be seen to be appreciated. (see the Suggested Reading section for "How To" articles on this subject.)

They are however, excellent baits for the majority of raptors. Their distress calls seem to increase their desirability. They work well as lure birds, harness birds, in bal-chatris (with double walls), or within a padam.

If two are attached by their legs with mini-jesses or impromptu noose jesses snugly to opposite ends of a short 8" or so dowel, they will fight and struggle in such a way as to quickly attract any raptor (drill a pivot hole in the middle of the dowel and slide it onto a pin in the center of a steel plate for a really superior bait behind a dho gazza, within a padam, or a "switch off" bait with a bownet).

Starlings are quarrelsome in enclosed areas , and find ways to injure themselves if given the opportunity. There are a several articles in old "Hawk Chalks" on trapping and keeping these birds. In my mind they are too labor intensive. Most involve large (measured in feet) traps and large outside cages. Smaller cage containers are complicated requiring attached fully enclosed "hide" boxes and extra large floor mesh to deal with their fecal output as well as specially designed feeding and watering systems they cannot foul. And, being a "large flock bird", disease issues are always a concern. Other small birds, i.e.. parakeets, Zebra finches, etc. can be kept in cages as per instructions from the pet store. They have their uses in trapping but are delicate and can only be used in warmer weather.

Pigeons and doves are another matter. They are hardy, come in various sizes, colors, and flying abilities. All birds of prey seem to consider them as a great gourmet meal. They love them. Most falconers keep a few on hand at all times, for food, emergency live lures, trapping, training or aesthetic enjoyment. And if one is interested in short wings, there are always Cooper's available for trapping around the pigeon coop. If one keeps Collared doves and flies them, look out for Sharpies too.

Pigeon breeds and dove breeds come in sizes ranging from sparrow size (Diamond doves) to huge meat pigeons.

The affordable Ringneck dove (Collared dove) are about the size of Mourning dove, and will often flock

he trap.

with our native birds upon turning feral. Ringnecks are less hardy than pigeons as lure birds and must be treated accordingly. Properly cared for and gently "lured", they do very well. I know of a falconer who used the same collared dove for 7 or 8 years as a lure bird for merlins behind dho gazzas.

Separate breeds or different sized birds should never be housed together. All the pigeon and dove species are mean little buggers and will bully any smaller specimens badly. Pigeons may be bought, or trapped but require appropriate quarters, food, grit, and fresh water to do well .

To locate pigeon breeders, check your state pigeon and dove breeder associations lists. Tread easily when dealing with pigeon breeders. Some hate falconers and all birds of prey. If necessary, don't allow them to know how the birds one is buying will be used. If trapping does come up, stress how the bait is protected as in a bal chatri. I tell them, quite honestly, how I've live trapped and transported Redtails and Cooper's from game farms and for pigeon keepers.

I have currently started a flock of Portuguese Tumblers which are about the size of a Robin or Mourning dove. They come in various colors and are reasonably good flyers, but according to the breeder, they are fairly easily flown down by a Coop's. I figure them to be an ideal trapping bird with multiple uses: lure birds, bal chatri bait, possible harness birds, etc.

NOTE: Flight conditioned pigeons are sometimes seeled for training or trapping purposes. I used to use a couple of pieces of masking tape to cover the eyes. This type of tape comes off easily and is water soluble. Almost half of the bait birds proved worthless for this endeavor. The pigeons would flap a few times then drop to the ground or refuse to fly at all. At some point, I discovered that a "half" seel worked much better. The pigeons used didn't necessarily go up that high, but they kept flying. The idea is that the pigeon is allowed see up and in front but not see the ground or behind. The simple way to do this is put a piece of masking tape at a slight angle across the middle of the eye from back to front. Then pinch the tape over the eye to form a cup, not touching the eye, so the pigeon can see only in front and above. One should experiment with birds in your loft to get the appropriate angle of the tape and to find out which birds tend to perform the best. Mark the birds that do what you want with an indelible felt tip pen.

Bird Harnesses

Harnesses whether for lure birds or noose harnesses can be made from a variety of materials. The primary consideration with both types is freedom of movement. The secondary concern is protection of the lure bird. To this end, heavy leather (which usually restricts the lure bird's movement) or as I have learned much lighter 420 denier nylon (I cut mine from old brush chaps) can be used for dove and pigeon sized bird.

For very light weight lure harnesses, use tyvek. 14 Ib. is adequate for sparrows upwards. Although it does not offer much protection from talons, it's light weight allows for better flight potential.

It is possible to use this type of harness as a noose harness by gluing one or two additional layers of tyvek under the back of the harness to stiffen it. A circle of 40 lb braided nylon fishing line glued in a zigzag pattern underneath this back piece and set as the attachment point for the drag line will also provide a secure attachment point for the standing line of nooses sewn through and around the the braided line. After tying the noose to the vest, use a large drop of contact cement to help hold the noose erect. This method should also work with the 420 nylon. The arab style harness also permits good movement, but does not offer sufficient support for a lure bird. They are easy to make, substituting various configurations of hardware cloth for the arab wire arrangement on the back. This rig makes for a great harness bird with multiple attachment points for nooses. Life Tip: *When* releasing your 42+ ounce hen Redtail to return to the trees after just calling her down, *Don't* throw your lure over your back to hide it from her, then *forget about it, and turn to walk off to a new area!*

The Transition from Trap to Falconry Bird

Steve Laymen (A well known Washington falconer) in the April 1996 "Hawk Chalk" article 'Passenger into Imprint' illuminates a number interesting and thought provoking ideas. To paraphrase one thought; Imagine you've just received your long saved for and desired chamber bird. With one or two loud excited friends, open the door of the carrier, pull the bird out and put it on the floor under you, so that it flips on its back, extends its wings and feet into a defensive posture. You quickly reach down and grab your new bird by the legs or cast it and hold it up by your face so your friends can loudly congratulate you, stare at the bird and poke their large cyclops-like cameras at it to record the moment...... Right!!

Why would you do this to a freshly caught passage bird??? Many people are guilty of this and wonder why it takes so long to man certain birds. This is especially true of short wings.

I had a friend in college who was an astrology buff. He had tag line for every sign. The only ones I remember were mine, the cusp of Sagittarius and Scorpio. "Sagittarius always opens his mouth wide enough to get the other foot in", and a Scorpio, "never forgets!" All short-wings and especially Coopers must be Scorpios. If you ever flown these guys, eyas or passage, you know this to be true.

I have long advocated, but not always practiced, disguising one self when removing passage birds from nets or traps especially if they are destined for falconry. I have worn a blanket over me and even a ghillie suit when removing birds from the traps or nets. Simply using a large blanket seems to be the best option. I try to put the blanket over the bird and

reach under to put the hood on, thus keeping the bird in the dark. Quiet should be maintained during this if possible and your new charge should be put in a holding tube for short periods or in an aba and placed belly down, in a quiet, cool area until jesses are added. A superior aba can be made from 3/8" seine netting to help keep the hawk cool. I do not recommend panty hose or stockings as a "straight jacket" for this, as experience has shown birds seem to get overheated on a warm day or in the car later.

A number of years ago, Gil Gross of Ohio developed lightweight hoods for merlins made of tyvek. They were excellent. Numerous sized trapping hoods can be quickly assembled using any hood patterns of letter weight "tyvek", and glued together. Braces are constructed from folded and glued tyvek.

Just prior to World War II, the Craighead brothers while visiting and hawking in India, wrote in Life with

<u>an Indian Prince</u> of the practices employed there. These methods were of course, centuries old.

Upon capturing a new bird, it was wrapped in a handkerchief, immediately seeled and hooded. The hawk was kept seeled for no more than 8 days. During this time it was handled, stroked, touched, talked to, and waked. This is a difficult proposition with so few retainers and serfs available today. But the concept of seeling and the slow return of vision to a creature whose brain is so given over to seeing (1/3 of the brain) seems to be almost a type of rebirthing and consequent imprinting experience.

Some traditional hawk training seems like one is creating a "Stockholm Syndrome" i.e.. "do it my way or you don't eat" This has worked for centuries, but can leave you with a trained bird which you must always fly at a very precise weight.

In some cultures, like the Japanese, taming and manning is achieved by reducing the hawk's weight ve

to starvation levels, then nursing it back to health. Some falconers in this country are known to utilize this method as well. It works, as rehabilitators have discovered starting with their often half starved charges, and it produces a "near" imprint tameness in the hawk. It would seem however that if one reduces a bird to a point where it's body is starting to absorb it's own protein from muscle, it's immune system could be seriously compromised and death could be the consequence.

If however, one follows the recommendations in Steve Laymen's article 'Passenger into Imprint' (*Hawk Chalk*, April 1996) you should safely get a very tame trusting bird that should be a pleasure to have as a hunting partner.

Consider how imprinting works. By strict definition, imprinting applies <u>only to precocial</u> species: chicks,

ducks, geese, and other birds that are mobile at hatching. Imprinting with these birds has a very short "critical period": (actually just before, sound or visual: a whistle or a laser pointer into the shell), but more naturally visually, during and immediately after hatching) to determine parental models.

We now apply the term to the altricial species like hawks, owls etc. who are helpless at birth and require varying time frames to identify their parent and sibling models. Sexual preferences occur with different species over different time frames based upon the variables concerning parental and/or sibling models. It is, in fact, as it applies to hawks, falcons, etc., a complex and not completely understood phenomena.

Yet, Steve Laymen has developed apparently sexually imprinted <u>passage</u> Prairie falcons that "chup", bow, and solicit their trainer. His techniques represent light-year jumps in taming/training methods, and we should all benefit from them. Back to the intent of this chapter; remember the response of a passage bird in a trap. It has never been this close to a human being. It's fear response was acquired early in it's life. <u>Never stare at it!</u> In the wild, a direct stare nearly always occurs only prior to an attack. A direct stare instantly provokes the "fight or flight" response in raptors. This occurs with most other animals as well. Ever see a jerk who always has to "stare down dogs"?

When ever possible, conceal yourself from a trapped bird in your trap or net. Steve Layman suggested that even when covering yourself under a blanket that one must be careful not to expose his eyes or even his feet to the bird. Put the blanket over the bird, reach underneath and hood your new charge. Then extricate the bird from the net, trap, or nooses. Again, keep noise down to a minimum.

Later introductions to your new bird can be made in a quiet room with an "electric hood" (a remote operated light switch} allowing the falconer to eliminate bates by removing all light when necessary. Try to empathize with this wild creature you have just captured. Minimize it's trauma in it's transition to your world, and Good hawking!

Life Tip: When hawking with a cast of Harris hawks and crossing a field of broom straw next to a remote country road to get to the edge of the woods and good bunny cover, and you look back at the road and see your two hawks suddenly racing back in that direction, and you see a cyclist with reflectors on his rapidly spinning shoes, and he sees the two hawks coming and pedals faster, and you know he can't outrun the birds, and you scream at him to stop while you are running at full speed, and you see the first hawk binding to his ankle followed by the second bird grabbing his calf; and he veers into the ditch ending in a tangle of cyclist, bike, and hawks, so you are desperately trying to think of what to say, then don't waste that thought process trying to remember how much the deductible is on the personal liability section of your homeowners policy.

he trap.

Of First Attempts and Early failures, Of Old Books, Skunks, Semi-Liquid Blinds, And How I Became An 11 Year Old Flasher

As mentioned earlier in the Preface, My initial interest in raptors was probably sparked by Disney's Morley Nelson films and books like the Hardy boys, The Hooded Hawk Mystery. in the middle 1950's. There were no known modern books available to me, but by the fifth grade, my mother would take me to the University of Virginia library where they had a couple of 18th and 19th century falconry books in the which I was allowed to read in the library. stacks The librarians placed me at a table near the front desk to keep an eye on me, not that the books had much value then, but I was very young, and the books were old! I was a good reader, but these books were a far cry from the "Hardy Boys" and the language took a long time to decipher. Eventually I

learned enough to get some good information. For instance, the old guys advocated feeding sheep neck during the molt not knowing that it was the abundant thyroxin in the neck which sped up the molt.

In the fourth grade, and a year before I started reading about falconry, I was given three baby barn owls by a girl in my class, Peggy J., who knew I was crazy about birds of prey. My friend Johnny told me that Warner told him that Peggy had a crush on me. This brought a round of laughter from us as we knew girls were a separate species whose only appeal was the volume and pitch of their squeals while running away after being teased.

I managed to drown my three stair-step babies by giving them water from an eye dropper at my mother's insistence. She believed mother birds brought water to their young in their beaks. So much for classroom trained biologists! I did correctly feed them bits of mice trapped around the the house, but I also squirted water into their open tongue-raised windpipe-exposed mouths with the eyedropper. I h a v e since learned that is a species known to carry water in it's beak to the young in the nest, the Golden Fronted Woodpecker in the Southwestern part of the country. My Barn owl babies died, and I did not know why. I needed to learn more.

A later reading of the old texts revealed how hawks could be trapped. The first method mentioned was driving a hawk from its kill and placing a noose around it, supported by goose quills. When the hawk returned, you simply pulled the noose tight around the bird's legs. Problem: I had no geese, and I had never seen a hawk on a kill. I did search for about a week on a farm within walking distance, but no luck.

Perhaps the trap needed was a bownet. I returned to the library found a picture, and made a drawing of one. I decided I could construct it, but I also needed a hide (a blind) and bait.

By Mid- March I remembered that almost every morning on the way to school, a very large whitechested hawk could be seen sunning on the bare branches of a dead, bleached out Sycamore tree. Sometimes a second-darker looking bird was there

too. The hawk was a long way (less than two miles) from my house, but I thought it worth it to make the trip. The tree was 300 yards west of Rt. 29 in a somewhat open field in an area known as Copley Hills. Far to the south of the tree, close to the railroad tracks, were quonset huts which were built after WW II as housing for the married students at the University of Virginia. The John Paul Jones Arena, the home court of the U.V.A. basketball team, now occupies the spot of that tree.

I made one trip on a Saturday morning to see how closely I could get to the bird before it flushed. This would tell me where to set my perfect hawk trap. My German Shepherd, Hulda, was always with me in those days, and she trotted back and forth about ten feet in front of me through the broom straw. Actually, Hulda was the family dog, but German Shepherds often choose one member in a family as their alpha, and I was her boy. On this morning I was at least 100 yards from the hawk when it flushed. At almost that moment, and in her mind saving my life, Hulda grabbed a daytime foraging skunk. The spray was everywhere!

Before the skunk was dead, I was at least fifty feet away and running hard. Hulda quickly caught up to me and seemed confused as to why I kept telling her to get away. A prolific skunk killer, I know of at least

he trap.

six she accounted for in her lifetime. She never understood why she then spent several weeks in the kennel and even longer before she was allowed back in the house. Tip: Tomato juice baths don't work!

I started to put the rest of my plan into action. It was at first difficult to find a sapling pliable enough to bend into a bow shape. Every sawed-off sapling I tried, cracked when bent. But then, an epiphany, the mimosa tree below my bedroom window had a low hanging, slender limb where my mother hung a bird feeder. Mimosa limbs are pliable year-round.

This tree and it's location were special to my Mother. She kept a bird-feeder on the limb that I wanted, so she could sit on the lower terrace in the evening with my father, have a cocktail, and watch the birds. A humming bird feeder also hung there in the summer. We were not even allowed to climb this favored tree although like most mimosas with their

smooth bark and springy branches, it seemed to beg for it.

How could I remove it so she wouldn't be suspicious. Perhaps an "accidental" break would work, a wind storm, a neighborhood kid, "wasn't me", broke it. I found I could not break it by hanging off it, so I sawed it a little at a time and hung off of it again, and again, and again, sawed a little, hung a little until, it broke. I left the feeder on the ground and ran off with my prize to the back woods to build my bow net.

It only took my mother about two seconds to see the saw marks despite my suggestion that maybe a prowling bear after the bird seed had broken the limb. I paid dearly for that transgression! But by the next day, I figured my still sore rear-end was worth the price of a real hawk.

The mimosa branch was very pliable and proved perfect for the 2 1/2' bow I constructed. I

he trap.

used braided fishing line from my casting rod to tie the bases together to form the bow, then I swiped the nets from a pair of old crab nets and connected them to the frame with more fishing line. No one ever noticed the missing netting, and my career as an outlaw falconer was set. The net with virtually no bag, barely stretched across the bow, an easily-glossed over detail in my race to become a falconer. Using other sticks, I eventually created a hinge system that actually worked if the net was propped up to a nearly vertical position.

A blind that one of the old books recommended was made from a blanket heavily sprinkled with mustard seed, watered, and allowed to sprout. The plant's roots would penetrate the blanket the book said, grow quickly, and provide a natural looking cover to lie under.

By this time, I actually knew what would happen to me if I took one of our blankets from the linen closet, so I asked Mom if she had an old one I could use. After explaining the whole concept to her she told me "No" but suggested I use burlap. We took two old gunny sacks from the garage and cut them into two somewhat equal rectangles. She even helped by sewing the two together to form a 6' x 6' piece. Then she took me to Gleason's feed store and bought me a small bag of grass seed (they didn't carry Mustard seed.) I was set!

Upon arriving home, I carried the gear to the edge of our property and spread the burlap out and applied the seed as heavily as would allow. Mom said I would have to slide it a few inches every day to prevent the roots from going into the ground. I carried a number of loads of water in a large galvanized watering can out the "blind" to be and waited, and waited, and waited. 11 year olds prefer instant results. A week went by and my seeds were sprouting. I thought another week would be perfect. But on Monday morning disaster struck. When I walked out to check on the growth (a twice daily occurrence), I found the burlap balled up roughly and entire sections of the plants ripped away. My life was ruined!

Once every month or so, my mother employed an old gardner named Frank F. Frank was there that morning, and he said it was deer. Frank said deer could be deterred by urinating in a cup and pouring it around the blanket.

Frank was great man though prone to a bit of excess with alcohol. While "in his cups" he occasionally advised me over the years upon matters of life and love, much to my mother's chagrin.

I quickly dragged the blanket into the side yard close to the house and spread it out. Hopefully, the deer wouldn't venture so close to the house. I respread grass seed over the damaged areas and added water. By the following Friday the new growth

had almost filled in the bare spots, and before my blind was taken to the trapping location, it was necessary to add the "deer repellant". It was almost time to leave for school, and I had forgotten my cup of urine. I looked around and there was no one in sight, so I started to do the expedient. Unfortunately, at that moment, my little sister's friend Jenny C. who was coming to ride in our neighborhood carpool, rounded a large forsythia bush about ten feet away. Covering her giggles with her hand, she ran to the house. She, of course, told my sister who thankfully didn't squeal, but Jenny also told her mother that evening, who called Mom......Only a major lecture, thank God!, but the story of my wienerwagging also circulated the fourth and fifth grades. I was a flasher long before I knew what that meant.

Two years later, while manning (showing off as she was completely tame) my first Redtail, Venom, I noticed her start to bow forward and raise her tail while Jenny was showing me her new bright red, fuzzy, angora sweater; I turned, Venom sliced! "Vengeance is mine sayeth the Me!"

I don't believe Jenny ever forgave me as I was laughing too hard when I tried to convince her it was an accident. I did end up up paying for the dry cleaning bill. Interestingly, only about 6 months after the "slice from hell" and the sweater incident, I suddenly noticed how really pretty Jenny (was) had become. (Too late! The peril and consequent punishment of a late-bloomer!)

After a long but slow grass- growing week, Saturday arrived! The books had said one should hang the blind/blanket and allow the grass to die and dry-out to reduce it's weight. There was no possibility at that point of waiting any longer. The Spring sun was short-sleeve warm, and the sky was a clear blue with only a few white wispy clouds skidding off to the horizon that afternoon. I had one of my childhood

buddies, Johnny P. with me. He was always ready for an adventure, so off we went. It took both of us to carry the heavy, rolled-up, wet blind the mile and a half or so to the trapping location, and the two hawks weren't there. We proceeded to set up the site with the net and the blind about five feet apart. We had foreseen that the hawks would be spooked by our arrival and planned on coming back the next morning before first light. I had not secured the bait yet, but figured we could get Mom to drive us to the pet store where white mice cost 10 cents.

We stopped on the way home to hunt water snakes in the creek below the house then headed home to find Mom. We had caught a nice Queen snake to scare my little sister's friends (my sister had, by then, become totally numb to my scare tactics, but most of her friends had not).

he trap.

Dad was at the hospital delivering a baby, and when I asked where Mom was, I was told she had gone to a Garden Club meeting! Agony!, Panic!

We never thought of the snake as bait. Hawks were noble creatures; they ate only birds and mammals like pheasant, rabbits, and probably small deer and antelope. Mice were acceptable but only on occasion. I had saved 15 cents to buy a 10 cent mouse from the pet store with 5 cents left over for a celebratory treat after catching the hawk. There was no way Mom would return in time for the pet store to still be open!

In our panic, Johnny and I grabbed an aquarium net and my mouse cage, ran outside, and pulled up logs, brush piles, old boards, anything that might house field mice. Nothing panned out.

Finally Johnny, always smarter than I was, suggested the solution. I had a very realistic white mouse finger-puppet that was great for teasing girls.

It slipped onto and sat atop the forefinger waiting to be wiggled. We threaded it onto the end of a long stick, attached a piece of fishing line to animate it and waited for morning. This, we knew would work!

We actually got up when the alarm clock woke us at 4 a.m. and headed for the trap site. By 5 o'clock, it was still dark and we crawled under the grass blind. There had been a heavy dew the night before, and the burlap and grass blind seemed to have evolved into a new form of liquid. Within a few moments, both of us were completely wet and cold. To this day I'm not sure how we lasted until first light without getting hypothermia, but the hawk was there!

Peeking out from beneath the hide, I pulled the string that wiggled the mouse. The old hen Redtail must have been doubled over laughing. She took off in the opposite direction and is probably still flying and laughing now, sixty years later. It would be over a year before I acquired my first Kestrel.

GLOSSARY

ABA: A restraining device that holds wings and covers the back but not always the belly of a freshly caught raptor. It cups the elbows of a bird and holds them close to the body.

ACCIPITER: The family of "true hawks" in this country, consisting of the Sharp-shin, the Cooper's, and the Goshawk. Often referred to as short-wings, they range from the smallest (3 to 8oz.) Sharp-shins to the (10 to 24 oz.) Coopers to the (24 to 41oz). Goshawks. Primarily forest birds, they eat mostly birds. Goshawks and Cooper's also eat small mammals.

APLOMADO FALCON: A small to medium, brightly marked southwestern falcon. There are three subspecies that range from the U.S./Mexico border to Peru.

BAL CHATRI or B.C.: A cage covered with nooses containing bait animals. Comes in a variety of

designs and is dropped, thrown, or placed in front of perched raptors.

BEACH TRAPPING: Refers to various trapping methods, usually the harness pigeon, for the Tundra Peregrine and occasional Merlin. It was originally used on the beaches of the barrier islands on the East coast. The harness bird is thrown from a cruising vehicle.

BIRD LIME: A very sticky substance made from natural products including, tree saps, waxes, etc. Bird lime has been used for centuries to catch birds in a variety of traps.

BOWNET: A framed net usually in a full or semi-circle design. To capture birds of prey the net frames range in size from three to eight feet in diameter. Bownets pivot on on their flat sides often powered by springs. BRANCHER: A hawk or falcon just prior to fledging. It moves about the branches ,cliff face, or breeding chamber though not yet fully flighted.

he trap.

BREAK-IN: To start to eat.

CALLING OFF To entice a hawk in training to come to the fist.

CARBIDE LIGHT: The most common method of illumination used in mines and caves prior to the development of long lived battery powered electric lights. They consist of a cylinder containing carbide and water which produces acetylene gas forced through a nozzle in front of a polished parabolic disk, and when lit, they produce an intense light. They are usually attached to the front of a hard hat.

DHO GAZZA: A vertical or slightly angled, rectangular net placed in the path of a raptor. The fine, near invisible net detaches upon being hit and envelops the bird of prey.

DIG-IN: A trapping method in which the trapper is covered with sand, snow, etc. and lures a falcon, hawk, or eagle to a bait bird held in his barely visible hands. This method has been used for hundreds of years by Native Americans up through modern falconers.

DOVE: For trapping, refers to the variously colored Ringneck or Collared dove, a Eurasian species often kept as pets. While hunting with a raptor, dove refers to our native Mourning dove .While a legal game bird, it is a protected species and may not be used as bait. DRAG-LINE: A varying length of line (a few feet to hundreds of feet} usually with a weight on it's end. It is used to slow and gradually arrest the progress of a harness bird, net, padam, or other trap, and the snared raptor.

EYAS: A bird of prey usually taken from the nest or from a breeder before it fledges.

FEAK, feaking, feaked To wipe the beak on the limb, perch, or glove after eating.

HARNESS: A leather jacket or a wire and string arrangement placed on a bait bird; pigeon, starling,

sparrow, etc. Nooses are attached to the harness for some trapping applications or it is left bare, and is attached to the top of a pole on a line so that when lifted, the lure bird flaps appearing incapacitated, thus luring nearby raptors.

JACK: The diminutive male merlin. The hen is simply called a merlin.

JESSES: Leather straps attached to a hawk or falcon's legs.

LUGGER: A medium sized, somewhat slow Asiatic falcon formally used with a barak to capture peregrine falcons.

MANTLE: A protective posture used by raptors to hide a kill or food. The birds crouch and spread their wings over their quarry in fear of being robbed. MIST NET: A vertical fixed net of very fine nylon thread. Three, four, or more horizontal cords are used to lift sections of the net creating "bags". Birds striking the net, tumble down into the bags. NOOSE CARPET: Many nooses attached to a wire frame or a board to ensnare any bird that walks on it. PADAM: Or phai trap is a circle of large (3 to 6 inches) nooses encircling a bait. Raptors attempting to snatch the bait are caught by their feet while passing. PASSAGE BIRD: Any hawk or falcon captured in its' first year of life with immature plumage.

PASSERINES: Any of the small migratory birds of the order Passeriformes, ie. perching birds, songbirds, etc.

SAKER: A large Middle Eastern falcon favored by the Arabs, and once used to bind to the head of a fleeing antelope so the pursuing Salukis could catch up and dispatch the quarry. Now they are used to hunt the Houbara (a large bustard) and desert hare.

SEEL, SEELING, SEELED; A method used to help tame wild caught birds of prey. A suture is passed through the top the lower eyelids of the bird and gently drawn up and over it's head. It is tied thus "blinding" the hawk and left in place while taming techniques are employed up to 8 days. It is rarely used anymore. In reference to bait birds, masking tape covering the eyes is sometimes use in certain situations.

SLICE: Retails and Accipiters shoot their excrement from their rear-ends after conspicuously bending forward and raising their tails. From the ground some can hit a wall six feet behind them up to three feet high. Falcons "mute" and their droppings simply fall straight down.

T-PERCH: A long pole held by a falconer up to ten feet or so with a cross piece at the top so as to offer a perch with a height advantage for a hawk in an open field.

"VULCAN DEATH GRIP" By cupping your hand over a raptor's head and gently squeezing, a raptor is persuaded to release any inappropriate person or dog it has grabbed. It is an emergency reaction. WAKE: To carry a freshly caught hawk or falcon on the fist often for days and nights at a time until the bird from habituation and fatigue will sleep on the fist. An old practice, it is rarely, if ever, practiced anymore.

HAWK OR FALCON	BEST BAITS	MOST PRODUCTIVE TRAPS	
Kestrel	mice, sparrows	Bal Chatri	
Merlin	sparrow, parakeet, zebra finch, starling, dove, smaller pigeon	Dho gazza, Padam, Harnessed starling	
Sharp-shin	same as Merlin	same as Merlin and Bal Chatri	
Coopers Hawk	sparrow, starling, dove, pigeon	Bal Chatri, Bownet, Harness starling, dove, pigeon	
Peregrine Falcon	pigeon, dove, starling, sparrow	Harness bird, Dho gazza, Dig-in, Bownet	
Goshawk	pigeon, quail, dove,(red squirrel with little tiny harness, you figure out design and put it on	Bownet, Noose carpet, Harness bird	
Redtail	rodents: mice, rats, gerbils, hamsters, sparrows, pigeons, dove, starlings	Bal Chari, Bownet, noose carpet, Harness birds	
Terradactyl	my ex-wife	Large Dho gazza made from spider web	

Some suggested reading

These are a few articles I have found looking through some of my old "Hawk Chalk" and "Hawk Talk" issues. Check your own or a friends. They contain wonderful amounts of information.

Hawk trap design:Trap?' (Bal chatri with cloverleaf nooses) "Hawk Chalk" August 1992, Scott Simpson

'An Improved Bal chatri' (Throwable B.C. with clover leaf nooses) "Hawk Chalk" December 1993, Scott Simpson and Mike Ball

'The Taylor-made Bal Chatri' (B.C. design with good noose tying instruction) "Hawk Chalk" August 1996, Frank Taylor 'A Bal Chatri for Redtails' (basic, flat B.C. for rodent bait, weighted with horse shoes, throwable) "Hawk Chalk" April 1990, Williston Show

'Good Bownet Design' (an excellent working bownet by Captain Shor. I've been using the same one since 1991) "Hawk Chalk" August 1990, Will Shor

'Installing and Using the Bownet' (A good description of a bownet operation) "Hawk Chalk" December 1990, Will Shor

'Improvement to Traps' (a description of a great and easy resetting Dho gazza. The best with a fancy machined release mechanism (I still prefer a rubber band release!) and notes on tying cloverleaf nooses to a bal chatri) "Hawk Chalk" December 1992, Will Shore 'The Ross Merlin Trap' (A portable trap for merlins, also illustrates a fyke type bait cage) "Hawk Chalk" December 1990, Charles H. Schwartz

'Fishing in the Sky - Ridge Trapping Raptors' (Very good information on ridge trapping by an expert) "Hawk Talk" 1997, Mark Shields

"True Extinction of the Rock Pigeon' Very good patterns for pigeon and dove harnesses) "Hawk Talk" 1998 Craig Nicol

'Beach Trapping Merlins (Good description of merlin trapping from 1995) "Hawk Talk" 1995 Mark Schriver

'The Hoop Trap, a Modern Padam' (very good descriptions of the historical padam and a modern one) "Hawk Chalk" August 1991, Hubert Quade Starling Trap' (a large 6'X8' starling trap and notes on keeping same) "Hawk Chalk" April 1992, Will Shor

'Care of Starlings' (A 4'X2' cage for 15 starlings with an attached 20"X16" hide box. Well described with diagram) "Hawk Chalk" April 1991, Will Shor

'Passanger to Imprint' (Excellent article by an expert in operant conditioning and behavior shaping) "Hawk Chalk" April 1996, Steve Layman

'Hawk Whispering' (more insights into manning and training) "Hawk Chalk" April 2001, Steve Layman

Suggested Books:

North American Falconry and Hunting Hawks, Beebe and Webster

A Falcon in the Field, J.G. Movrogordato

Life with an Indian Prince, John J. Craighead and

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Frank C. Craighead, Jr.

Hawks, Owls, and Wildlife, John J. Craighead and

Frank C. Craighead, Jr.

Bird Trapping & Bird Banding, Hans Bub, Translated

by Frances Hamerstrom & Karin Wuertz-Schaefer

Trapping Essentials, Ben Woodruff

Understanding the Bird of Prey, Nick Fox

APPENDIX

Supplies

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Duluth Net: Duluth, Minn., (800) 372-1142 This very accommodating company sells many types of netting, including 210/2 multifilament gill netting for making small dho gazza nets and .20 mono netting as well. Talk to Bruce.

Memphis Net: Memphis, Tenn., (800) 238-6380 Nets and supplies including larger hoops (20" to 5') for fyke containers, stiff nylon monofilament, net making supplies, etc.

Murphy and Reed Spring Mfg. Palmyra, N.J., (800) 524-0344 Bownet Springs for "Hawk Chalk" model. Torsion springs; you need at least 41/inch pounds torque and at least 3" legs. For the bownet in the "Hawk Chalk" article by Captain Shor, August 1990. ve

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