

l'Alethe

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y personal journey of discovery to identify "l'Alethe," the mystery falconry bird of 16th century Europe, began in the Bird House of the Bronx Zoo in 1971. I received my falconry permit from the state of Washington in 1969-back then there was no sponsorship; licenses were applied for and issued based on a short questionnaire supplied by the Fish and Game Department—but the continual uprooting of the Nelson family precluded the establishment of a mews. I contented myself by reading every published work of falconry I could lay my hands on, building hoods, and hawk watching/nest hunting wherever my youthfully-wandering feet would take me. Living near New York City at that time, trips to the American Museum of Natural History and to the Bronx Zoo provided bonus opportunities to explore raptor related experiences within the Big Apple.

I remember the day I entered the Bird House and saw a tiercel bat falcon in a glassed-in enclosure. I couldn't believe my eyes. I had seen a lot of raptors by then, but that beautiful creature was exquisite beyond compare. From the zoo I made a beeline to the library and researched *Falco rufigularis*. While doing so, I learned about another, even more exotic raptor; the orange-breasted falcon, *Falco dieroleucus*. I discovered that the orange-breasted, like the bat, was South American in origin; but, as





Author and aplomado in the Palouse, a region of eastern Washington characterized by endless rolling hills of winter wheat. Hungarian partridge are found in good numbers here.

a member of the "peregrine tribe," was well-known to the falconers of medieval Europe. Back then, I just accepted this as fact.

Tive years later I moved back to Washington and finally had the chance to fly some "beginner birds" (read: kestrels, redtails, and Cooper's hawks) when an opportunity for travel to Mexico presented itself in the form of an off-campus study program. I jumped at this chance and for the next three-and-a-half months spent time exploring the Mexican interior, the Pacific coast, and the Yucatan Peninsula. I saw a variety of exotic raptors-including wintering peregrines (in 1976 that was a huge deal to an aspiring longwinger)-but my efforts to find obf's were unsuccessful. Knowing now what I do about their rarity and the

great lengths that some prestigious and well-funded falconer/biologists have gone through to locate them, I am not surprised that I, a teenaged college kid on a shoestring budget, failed at the time. But I came away from the quest with a pretty good mental map of the type of habitat the obf's haunted; by observing the hunting behavior of bat falcons in the village of Emiliano Zapata (the two species having much in common in terms of overall build and general hunting habits) I also developed a good notion as to how that type of falcon operated.

Fast-forward to 1982. By this time, I proceeded further down the falconry trail, having added wait-on longwinging to my credentials. In particular, I developed an appetite for hawking Hungarian partridge (*Perdix perdix*). For those

who haven't actually hawked huns, they are a robust and dynamic medium-sized game bird whose abilities on the wing "under fire" from raptor attack have to be witnessed to be properly appreciated. Being a red-muscled bird, they have flight capabilities and staying power that brings them closer to the grouse species as a quarry bird than to their white-muscled gallinaceous cousins the chukar, quail and pheasants.

aving finished college, my first wife and I decided to pursue teaching careers in the Alaska bush. This half-decade adventure could fill volumes of its own, but germane to this tale is a book I read to help wile away the long, dark hours in mid-winter on St. Lawrence Island. The book was a compendium of



Aplomado falcon. Photo by Rob Palmer.

a series of British Falconer Club Journals dating from the late 1930s through the early 1970s. Among some great pieces, two articles caught my eye. One by T.A.M. Jack entitled "Partridge Hawking with D'Arcussia" (1954), the other by William Ruttledge entitled "The Identity of l'Alethe" (1955).

n these articles, translated writings of the Renaissance-era French falconer Charles D'Arcussia, were examined for information that could identify a South American raptor the Spanish were importing in the 1500s and 1600s which they called "aleto" and which the French purchased from them and referred to as "l'alethe." The salient points tendered by

Ruttledge were that the physical description could only fit three possible candidate species: 1) the orange-breasted falcon; 2) the collared forest falcon (Micrastur semitorquatus); and 3) the aplomado falcon (Falco femoralis), all three being small- to medium-sized orangish Neotropical bird-catching raptors. Ruttledge concluded at the time that the "high mettled" partridgecatching alethe could only be the orange-breasted falcon because, even though the physical description better fit the aplomado, he believed that the aplomado had insufficient courage and ability to be considered high-mettled, tagging it with the disparaging label of "slack mettled" instead.

n 1982, I did not know what the alethe was, but I knew what it wasn't. My experiences with partridge hawking, along with my self-study of Neotropical raptors, gelled at the time to reject the conclusion that the quasi-accipiter-like alethe-who was known to fly from the fist directly at quarry and follow it into cover-was the skyseeking, short-tailed, sickle-winged, big-footed, orange-breasted falcon. Nor did the largish, cover-hugging collared forest falcon fit the bill for me either. The former was too falconine, and the latter was too accipitrine. The alethe represented a middle-ground between those extremes, and I remained openminded to what it might be.





Aplomado falcon. Photo by Rob Palmer.

p until 1987, I accepted Ruttledge's conclusion that aplomados were slack-mettled, having no data to the contrary. That is, until Harry McElroy wrote his ground-breaking "A Falcon for the Bush" in one of that year's NAFA's Hawk Chalk extolling the virtues of the aplomado. McElroy made no mention of the alethe debate, and he focused only on the hawk itself. That gave his article significant value, because he was simply sharing objective behavioral descriptions and not drawing any historic conclusions. Even so, when reading D'Arcussia side-to-side with McElroy, the two falconers, separated by some four centuries of time, were clearly describing the same creature. Thanks to Harry McElroy, I found my alethe.

For the next six years, back in the lower 48 and going through some pretty significant life changes; I continued to dig for answers. It wasn't enough to feel I "knew" the solution. What was required was to demonstrate beyond any reasonable doubt that my certain belief was in fact...fact. I knew to do this I must follow the scientific method slavishly and, in the end, I must reproduce the flight of the alethe at its defining quarry to eliminate all possible doubt. No other flight at any other quarry (no matter how large or otherwise seemingly impressive) could replace this highest bar already set by D'Arcussia and his contemporaries. To achieve genuine high-mettle status, it would be the dynamic hun, or none.

The Alethe Project

Statement of the Problem: What is the modern ornithological identity of the raptor known to Renaissance Europe as "aleto" and "alethe?"

Background Information: The following was extracted from my 1995 research article "l'Alethe Revisited" published in the Washington Falconers' Association Mewsletter, then reprinted in scaled down form in the 1996 NAFA Journal under the title "In Search of l'Alethe." I have also added, here, additional information that has since emerged.

The alethe was described by Charles D'Arcussia as a bird about the size of a tiercel (peregrine), pale-orange in front, with a band around its belly shaped like an upside-down crescent. It perched in trees, flew fast and low (but not terribly far) pursuing its quarry-"properly" the partridge-with such persistence that it would enter cover to catch it. It was known to have the annoying habit of hiding with its kills inside cover. The aplomado falcon fits these descriptions perfectly on all counts. The collared forest falcon appears somewhat larger than a tiercel peregrine, and has no significant markings across its belly. The orange-breasted could not be described a pale-orange, being a richer umber-color, and is known for being extraordinarily dynamic, certainly willing and able to fly great distances at check (Biengolea, 2005).

To this, Diogo Ferreira, a Portuguese falconer from the same era, added that the aleto had a band encircling its head the same color as its chest, that the underside of its



wings were "cross-spotted" like those of a falcon (peregrine), and that its legs and toes were slender and long. He also wrote that the aleto should be hooded, but that many falconers chose not to because the aletos arrived un-hood-trained, and (presumably) were then difficult to bring around to hooding. Again, the aplomado fits these descriptions to the letter. Conversely, the collared forest falcon is barred under the wings (like a hawk) and not cross-spotted (like a falcon). The orange-breasted has almost grossly oversized feet, and Oscar Beingolea describes the orange-breasted as being even easier to hood-train than the most docile peregrine.

7ith thanks to John Loft for translation, in the rare 17th century hawking work "The Falconry of Saincte Aulaire," another French falconer, Pierre Harmont, adds his observations on the "aleps." He states they were the size of a sparrowhawk and had a foot that is like a sparrowhawk as well. This description eliminates both the collared forest falcon (well beyond the size of a sparrowhawk) and the orange-breasted falcon (whose thick toes could never be described as like that of a sparrowhawk). He also describes them "as hardy as an old lanner...can stand serious affliction." This would describe the resilient aplomado, but not the more easily compromised orange-breasted. Harmont's aleps were also: "stiff-winged in their flight, so much so that you will not see them bend their shoulders;" and "easy to train to the lure or fist...very good at returning," traits held-and notable still in modern times-by aplomados.

Peruvian native, writing about native storytelling during the era of the conquest, recounts an incident over the city of Cuzco where a group of small falcons drove a condor into the ground (Oscar Beingolea, pers. comm.). These little falcons were very beautiful, were exported "in large numbers" by the Spanish, and were called "aletos" by them. The collared forest falcon is never observed flying in the open sky

or in groups, and it is not found in the region around Cuzco. The orange-breasted is not found in the region of Cuzco, either, and has probably always been quite rare and hard to obtain. The aplomado, a social bird in the wild, cooperates with family members in hunting (and perhaps territorial disputes as well), is found in the region of Cuzco, and is an abundant raptor that could have been exported "in large numbers."

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Hypothesis: If the modern aplomado falcon (which matches all significant physical and most behavioral descriptions of the alethe) was indeed the medieval alethe, then the aplomado should be capable of capturing grey (Hungarian) partridges in winter time with relative ease, because that is what the genuine alethe was renown for, a feat which remains the "acid test" by which the aplomado's "high mettle" status must ultimately be measured.

Materials: To recreate the flights described by D'Arcussia, one needs a trained female aplomado falcon; access to wild Hungarian partridges in winter-time on terrain similar to that which D'Arcussia hawked over and in similar temperatures, sufficient dog-power to locate partridge and reflush them when needed.

<u>Procedure</u>: Obtain a female aplomado falcon; train it for partridge hawking off the fist; capture at least one (and preferably more)

wintertime partridge with relative ease.

Data: In 1999, through the auspices of the Washington Falconers' Association raptor breeding cooperative, Doug Alton and I cooperated to bring in the first legally-obtained Peruvian aplomado falcons in the United States in recent times. Doug must be given credit for actually procuring our breeding stock at great personal effort and expense, though I contributed significantly through authoring the cooperative permit for South American aplomados that gave him the ability to do so. We truly have cooperated from start to finish in all details of this undertaking.

n 2002, I produced the first U.S. hatched Falco femoralis L pichinchae, a male which my son named "Inca." Doug followed a week later, hatching a female. To date, between us, we have produced (to banding age) 40 young aplomados, learning some significant lessons about incubation and hatch with these challenging little raptors. In 2004, I finally had produced enough offspring to justify becoming seriously engaged in my original goal. I made a captive-bred female "available" to myself to fly, and proceeded as planned.

To compress the data, this bird was spectacularly successful in capturing feral pigeons (more numerous and available for daily hawking than were partridge). She did chase partridge, and I witnessed many alethe-like pursuits. But some details troubled me. For instance, in deep winter, when finding partridge was easiest, her performance deteriorated. Also, she became discouraged after too many partridges "gave her the slip" by disappearing over the hilltops of the rolling Palouse wheat lands. In early October of her second season, she finally brought a nearly-grown hun of the year to bag.

Pollowing that capture, I accepted a generous invitation and traveled to France to visit with Henri Desmont and observe partridge hawking in the winter there. I learned two very significant things. Winter in France



A trip to France in December of 2005 answered some crucial questions about partridge hawking with alethes. Note the nearly table-top flat topography, low vegetation interspersed with easily penetrable cover (hedgerow), and mild winter weather.

is much milder than is winter in Eastern Washington; the temperatures there rarely dropping much below the freezing point. Also, in France, the partridge are found in wide open, almost tabletop flat, terrain, and the cover is typically narrow, penetrable hedgerows. This meant that the low-flying ancient-alethe would have been able to maintain visual contact with her quarry from the beginning of the flight to the end, and available cover would not inhibit relocation and reflushing. Recreating the hawking conditions in France, as a controlled variable, required seeking much different slips from those I attempted in my own hilly country covered by acres of sage brush and tumbleweeds.

At David Baker's encouragement, I decided to start with a fresh female in late summer of 2006. The idea was to focus entirely on

gamebirds, leaving pigeons out of the equation. The pigeon flights were no doubt good for conditioning, but "04" became too proficient at catching them and would leave potential partridge slips to fly to neighboring barnyards in search of her favorite prey. Conditioning would be accomplished, after initially wedding the new hawk to gamebirds, by kite/ballooning. This climbing conditioning would not be intended to encourage waiting on, but strictly to increase muscle strength and wind.

selected a female from my project that showed early promise by instantly binding to a proffered live quail. After this, she was given only live birds in the chamber for about two weeks, which included bobwhites and chukar. By the time I picked her up for training, she knew what she was about.

"Cuvee" was trained to the hood and introduced to the dogs. She made two wild kills before our first partridge foray.

n a beautiful October day in winter-wheat country we saw several unbelievable flights on partridge of all ages. This clearly was a splendid specimen of an aplomado. At the end of that day, she raced a nearly grown hun 150 yards up a steep slope and captured it right at the crest of the hill. This seemed a very promising start.

I chose to leave Cuvee with David, as I couldn't make the long drive to his region on a regular basis and wanted her to be exposed to as many early season gamebirds as could be had. Additionally, David had developed a proficient kite/balloon routine and agreed to condition her using this. After nearly six weeks at "kite camp," Cuvee



The acid test: Cuvee poses with her December 18th hun some six weeks after its capture. While tusseling with her partridge, she was attacked and seriously wounded by a local redtail. Despite its near-tragic conclusion, this flight show-cased the "high-mettle" capabilites of the aplomado falcon on the alethe's most challenging quarry, Perdix perdix. Note the table-top terrain over which this flight occurred. Photo by Dan Robertson.

had added three more kills to her credit, two being young pheasants of the year, and was climbing 1000' to the target on the kite string.

I took her back into my care in November and continued to hawk her in my area. But partridge flights were rare, and I switched my focus to California quail to maintain conditioning. We had a few outstanding flights and caught a couple of quail, but I was eager to return to larger quarry.

On December 18, on a frosty (but not frigid) afternoon, Dan Robertson and I took Cuvee and the setters to a location that had two important qualities: 1) it was open, flat, and sparsely covered; 2) it held partridge. This slip was as close to the situation I observed in

France as I could hope to find this close to home. Two days prior, my apprentice, Suzanne Baird, and I nearly captured a mid-winter partridge at this spot. It only escaped by hiding itself so well we could not relocate.

After searching several spots where we had located huns in the past, we walked to a new location Dan felt was promising. Sure enough, J.D., the older setter, locked up. I quickly loosened the braces of Cuvee's hood, but waited for the right moment to remove it. The right moment was precipitated by Strider, the younger setter's, gauche intrusion. To my surprise, a group of at least 15 partridge burst up out of the tall

grass. I slipped the hood from the aplomado's eyes and, even though the covey had cleared cover and was well under wing, she was after them in a flash. Dan exclaimed in amazement as the little falcon tore across the sky. We lost sight of the covey but saw the aplomado climbing steadily to stay high enough to keep her quarry in sight. Finally, she turned downward and rushed over the top of a distant stand of sage brush, finishing with a very nice 60' vertical throw-up that ended in a sudden downward plunge into cover. Wow! That was hot!!!

to find Cuvee sitting on a sage bush. The setters were coursing about the stand when I heard the unmistak-

able clatter of a hun flushing. This was followed by a black and orange streak. The rest of the covey popped up in ones and twos, but they were clearly intimidated and did not fly far before they settled back down here and there, scattered throughout the area. We waited for Cuvee to return, hoping that if she did we could produce another of the covey for her to chase. She did not reappear. Next, we gathered up the dogs on a lead and I began to seek a signal. In retrospect, I should have rushed toward the signal right away, but I really didn't expect her to catch the hun so quickly. But she did, and ironically that was her near undoing.

The signal led me out into the middle of a closelycropped alfalfa circle. Looking up, I noticed a raptor sitting on the pipes and made the assumption that it was Cuvee. I shouted to Dan that she was on the irrigation structure and the hun was probably in the tangle of weeds at the base of the center pivot. When Dan arrived with the setters he gave a long look at the hawk in the distance and said, "Hey Bud, I think that's a redtail." I looked again. If you have ever gone trapping and convinced yourself a distant insulator was hawk on a pole, you know where my head was at. Assume makes an ass of you and umption.

"If that was a redtail it would

have bumped by now."

No sooner did the words leave my lips then the redtail turned, sliced, and flew off. I began to feel a sense of foreboding. With a renewed urgency I began to track again. Again Dan pointed out the obvious, and I continued to live on the banks of de Nile.

"Is that her on the ground?"
I looked at the odd-shaped dark

object in the field at a distance.

"Naw, that's just a weird shaped mound of dirt."

But, as I continued to track the signal, I was drawn toward the triangular shape. When it began to wave slowly about, I realized, a sick feeling in my gut, it was the slender wing of a falcon, pointing straight

upward into the air. The angle was all wrong. I rushed to the spot and found Cuvee flat on her back, a terrorized look in her eyes, feathers (hers) scattered about. She was alive, but just barely. Quickly, I gathered her up and put her into my jacket to keep warm.

"J.D. is on point, Jim." Despite Dan's deep concern for Cuvee, he remained ever-observant.

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looked to where he was pointing and, sure enough, LI.D. was locked up solid, just a few feet from where we were standing. I approached him, and he shuffled forward, freezing again. I urged him on, and again he shifted, now locked up like a statue and looking straight into the ground. The partridge was crouched in an alfalfa furrow just beneath his nose. I reached down, expecting it to blast off, but it remained in place. I noticed the feathers on its back, they were torn and askew. I carefully pounced on it. It had some struggle left, but was not in good shape. Dan examined the breast and reported it was injured there. The wound proved to be mortal and the partridge expired a short while later.

Looking at the scene, I could mentally see the action unfold. The flight left the sage stand, whipped behind two tall hay stacks and disappeared out of our view. The two birds raced out from cover into an open alfalfa. The hun might have been overtaken, but more likely it folded under the pressure of Cuvee's pursuit and landed in front of her, hoping to evade her on foot then blast off in another direction. But Cuvee was nimble and had sticky feet, and no doubt she piled into the hun and the two birds tussled on the ground in the open. The redtail, perched somewhere nearby, could not have resisted this opportunity and would have immediately launched an attack of its own, grabbing the uppermost bird, Cuvee, and knocking her off the partridge. The exhausted and wounded hun hunkered in tightly, hoping both raptors were gone. Cuvee turned to face her attacker on its approach, or she managed to break free and flip over onto her back. She either fought the redtail off with her beak and feet, or my approach with the telemetry bumped it off of her, it was probably a combination of both. In the end, Cuvee's brilliant mid-winter partridge flight ended in near disaster.

Conclusion: Cuvee-now recovered-is retired to the breeding chamber with Jim Ingram's outstanding 2006 "tercelette," Sgt. Pepper. In this way, I hope her aggressive nature will continue to express itself through their offspring. The final flight of her falconry "career" was perhaps the most significant flight in mine. This 340 gram aplomado's capture of a 370 gram mid-winter grey partridge-the flight originating out of the hood, off the fist, and over a setter's point. Then after a single reflush out of tall sparse cover, motoring her quarry down in fair flight and with relative ease-congealed all of the elements required to validate my long-standing hypothesis and bring to conclusion a 400-year-old mystery, and a 35-year journey of personal discovery. Cuvee lives today as a bona fide high-mettled partridge catching alethe ... re-

Charles D'Arcussia would have approved-of that I have no reasonable doubt.