
With An Eye on Raptors

Appendix: WRS Guidelines:

1. This being a road survey, THE MOST IMPORTANT CONSIDERATION IS SAFETY. I suggest a designated driver if possible.
2. Design your own route(s). I suggest min. of 10-20 miles and max. of 100 miles. Minimize miles on busy roads (though not easy in some areas). Avoid non-maintained roads that may not be passable some years.
3. Dates: You choose the day: Jan. xx-Feb. xx inclusive. DO THE ROUTE JUST ONE TIME. Do not repeat for the sake of “improving” the counts —THIS IS CRITICAL!
4. Time of day: Mid-morning to mid-afternoon if possible.
5. WAIT FOR GOOD WEATHER: Avoid foggy, windy, rainy, snowy days.
6. Record hours of survey time and miles driven.
7. Note the average approx:
 - snow depth
 - temperature
 - % cloud cover
 - wind as calm, light, or strong
8. Record the following as possible:
 - Harriers: Ad. male or female; or immature
 - Red-tails: Adult or immature
 - Rough-leg: light or dark form
 - Kestrel: male or female
 - All other raptors.
 - Vultures (TV or BV)
 - Don't linger over birds you can't easily age or sex—just record species.
9. Any shrikes?
10. You may leave your car to scope or get closer to a bird but do not go on hikes looking for birds.
11. If desired, you may establish safe stops at good vantage points where you can get out and scan more thoroughly.
12. IMPORTANT !!! Coordinate with others in your county to avoid route duplication.
13. For consistency sake, I will not accept routes that are primarily on interstate highways.

Watching Autumn Hawk Migrations in Batumi, Republic of Georgia

By Arthur W. Green

When I talk about spending my fall watching hawks in Georgia, most people think peaches, Jimmy Carter and the city of Atlanta. But I'm not referring to that Georgia. Instead, I am referring to the republic within the former Soviet Union that most people only know because it made international headlines in 2008 when it became embroiled in a brief, but bloody conflict with Russia. Most people, knowing only this, assume it is an exotic and dangerous place for foreigners, and so they never discover the truth: Georgia is not only a delight for travellers but is home to one of the best places in the world to watch autumn hawk migrations.

After working as a contract hawk counter for a few seasons in the northeastern U.S., I became enamoured with the notion of spending a full count season abroad so I could learn to identify raptor species I'd never encountered before. I soon set about making my dream of an “overseas education” a reality and began checking the available literature and the internet to draw up a list of prospects. I looked into several projects around the world, but one count conducted along the eastern edge of the Black Sea in the Republic of Georgia drew me in right away.

Batumi Raptor Count (BRC, <http://batumiraptorcount.org/>) was founded in 2008 by two ornithologists from Belgium as vehicle to explore the scope of the Black Sea bottleneck for migrating raptors during fall passage in the western Palearctic.

Results that first year were jaw-dropping; 806,679 migrants, 31 different species of raptors. (See Table 1 of 2008 data for birds identified to species-level.) Subsequent counts confirmed the strength of this bottleneck, and the project soon began building a critical mass of international volunteers (mostly from western Europe) and putting down roots within Georgia as a permanent endeavour. In a nutshell, I decided to spend my fall in Georgia with BRC for four reasons: 1) The prospect of seeing new species in such number meant I'd have ample opportunity to see and practice with most every species I was likely to encounter; 2) I'd join an experienced team of counters who were serious about counting birds and who knew well the species I was unfamiliar with; 3) Accommodations were offered by BRC to project participants in a homestay near to the count sites at very reasonable cost; 4) I was invited to join the project for the full count period as a count coordinator, essentially allowing me to get my hands dirty with the protocol and the logistics of running the count.

As a destination for ecotourists, Georgia is inexpensive, safe and convenient to explore. It is host to a stunning diversity of climate, habitat, topographical relief, fauna and flora (including endemics)—rather remarkable for a country just larger than the state of West Virginia! The uniqueness of all this becomes apparent in Batumi, Georgia's third largest city (pop. ~122,000), located in a subtropical region of the country

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in the Autonomous Republic of Adjara at the foothills of the Caucasus Mountains. It was best known during Soviet times for its tea and citrus plantations, autumn rains and as an enclave for rich Russians. Following the collapse of the USSR, these plantations are no more, and the estates of the wealthy dotting the countryside were snapped up by extended families that eke by on subsistence agriculture and part-time work. The government under President Saakashvili has made great strides in recent years in overhauling the derelict Soviet infrastructure that can still be seen throughout the region.

After the spat with Russia in 2008 that left the separatist Georgian republics of South Ossetia and Abkhazia under Russian control, ties between the U.S. and Georgia have grown strong. And the economic will brought to bear by the West can be seen throughout Batumi in the almost hurried construction of office buildings, hotels and restaurants. City parks have been revamped, and the famous Batumi boardwalk has been extended almost as far south as the Chirokhi Delta. It is clear that with its almost indescribably Mediterranean flair, Batumi is intended to become a major tourist destination, although whether this will bear out remains to be seen. It is a remarkable place, even before you factor in the avifauna that can be observed in number just outside the city.

For those accustomed to counting at monitoring sites in North America, there are some important differences in how the count in Batumi is conducted. The count itself runs from mid-August through mid-October at two monitoring sites stationed roughly 10 km north of Batumi in the villages of Sakhalvasho and Shuamta, 2 and 5 km and inland from the Black Sea. These sites are operated simultaneously during the count period. During peak migration for Honey Buzzard in late-August/early-September, an experimental third site is operated within Mtirala National Park, a heavily forested interior site roughly 15 km inland from the Black Sea coast. Data collected from this site helps establish the strength of Honey Buzzard migration moving inland that runs the risk of moving undetected by the primary two watchsites, but this



European Honey Buzzard (adult). Photo by Romain Riols

data is not added to the numbers recorded by the primary sites for the official count.

In 2010, an experimental count was also conducted in Kazbegi (~280 km from Batumi, as the hawk flies) to further gauge the extent of Honey Buzzard migration away from the Black Sea coastline in Georgia's interior. These experimental counts helped establish that nearly all Honey Buzzard passing through Georgia appear to use the Batumi bottleneck (W. Vansteelant, pers.

comm.) rather than dispersing across the country in a broad front the way that Broad-winged Hawk do in North America (Kerlinger 1989). Put simply, this means it may be possible to accurately monitor this species from this single locale; while for other species that migrate across a broad front in Georgia (e.g., Steppe Buzzard and Levant Sparrowhawk), it may be necessary to first establish a network of watchsites (akin to what HMANA has in the northeastern United States) to monitor them effectively.

Given the sheer volume of birds that pass by during periods of heavy migration, several measures are taken to minimize observer fatigue without compromising the quality of the count. Each of the count stations operate in teams of four or five individuals, with tasks, species and sections of sky divided between the observers so the team can efficiently provide the best overall coverage of the watchsite. (Those who've counted in teams at other large-volume sites are undoubtedly familiar with such task divisions.)

Another provision for the large volume of raptors is the use of Palm TX handheld computers running customized database entry software to record count observations in the field. These "palmtops" dispense entirely with the headache of making and transcribing paper records, and in practice, are much faster than paper and pen in recording observations. At the end of the day, these devices are connected to a laptop computer, which produces a Microsoft Excel-compatible spreadsheet file of the day's count. Because the timestamp of each observation is recorded automatically in the database software, observations are stored with greater precision than the hourly precision counts



The author (far right) hawkwatching in Georgia. Photo by Mael Sinoir

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typically recorded by watchsites in North America. And additional fields, such as the age and sex of individual birds, can also be stored with each observation. A side effect of this greater precision is that it enables a special computer program to help reconcile redundant counts of birds observed by both stations, eliminating many of the “double counts” that might otherwise skew the day’s total.

Also, starting in 2010, not all raptor species are systematically counted. This is the most controversial aspect of the BRC protocol, and one that may be initially difficult to understand. After the end of the 2009 count, the BRC project organizers made an assessment of each species to decide which ones to include in future monitoring efforts. Some of the criteria used to make this assessment included a) whether extant data about the health of a species’ population would warrant its inclusion in the count; b) if the percentage of a species’ worldwide population estimate potentially seen at the Batumi bottleneck during fall passage is large enough to function as a usable “sample” of that population; and c) whether annual variations in the numbers of a species recorded each season at the Batumi bottleneck are low enough to make monitoring efforts productive (See: Lewis & Gould 2000).

What all this means for the counter in the field is of 35 raptor species that have been observed at the Batumi bottleneck, only 21 of these get entered into the handheld computers. Some of the species omitted from the count (e.g., Steppe Buzzard, Red-footed Falcon) may surprise you. But the primary motivation for excluding species was to economize count effort by collecting data only when the quality of the data produced justified the level of effort involved to collect it. It’s not something a watchsite accustomed to a lower migration volume would typically need to worry about; but in Batumi, when you are deluged by literally thousands (if not tens of thousands) of birds, you begin to appreciate the thread of pragmatism that is sewn into the fabric of the counting protocol.



Light morph Booted Eagle. Photo by Romain Riols

There is, however, one hallmark of my experience counting overseas that I feel absolutely needs to be discussed. Counting at most North American watchsites in the year 2012, it is much too easy to forget some of the reasons hawkwatchers first took to the ridges decades ago. But in Batumi, you remember. You remember, because it will no longer be necessary for you to imagine what Maurice Broun saw at Hawk Mountain, Pennsylvania, 70 years ago (Broun 1948): hawks falling to the earth after being punched through by gunfire from thickets just up the ridge.

The very features that make the Batumi bottleneck almost unparalleled for watching autumn hawk migrations makes it a veritable shooting gallery on days of peak migration. There are laws against this in Georgia, so this shooting is done illegally, but there is no enforcement by officials. For the Georgian people who do this, it’s a pastime, a kind of recreation, not unlike fishing. When you meet these people, you’ll quickly discover for yourself that they are not bad or evil. In fact, many of them are so profoundly hospitable and utterly devoid of the kind of duplicity I’m greeted by elsewhere that I remain stunned they are even capable of this. They simply do not know better. I’m honestly unsure of my feelings as I stand on a ridge with an almost clinical detachment from the migration I love so dearly, watching birds slowly glide down into the tree canopy after being grazed fatally by lead shot, not being able to do anything but continue counting. I think you can go to Georgia expecting this, but still nothing quite prepares you for it. Speaking personally, I went because I felt, as I indeed feel, that the importance of this work cannot be overstated.



Juvenile Steppe Eagle. Photo by Romain Riols

On a closing note, I’m encouraged by Batumi Raptor Count’s efforts to expand beyond their monitoring program by launching educational programs in neighborhood schools in Adjara and working closely with local conservation officials to raise awareness and bring about enforcement of the existing laws. While it is unlikely widescale shooting will disappear this year or the next, thanks to the good work of the people involved with BRC and its partner organizations

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Remains of shot raptors. Photo by Johannes Jansen

in Georgia, I believe I will live to see the end of this blight on this fine country. Whether you visit Georgia as a tourist or choose to join BRC as a volunteer, I hope you won't let this problem dissuade you from seeing the beauty of the Georgian people and their culture, and most of all, their birds. I believe everyone should witness the awesome scale of hawk migration in Batumi.

Arthur Green serves on HMANA's Board of Directors and worked as a count coordinator for Batumi Raptor Count in fall 2011. He will be returning to Georgia to work with BRC again in 2012.

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Table 1. List of species seen at Batumi Raptor Count in 2008 season (identified to species)

Griffon Vulture	1
(Eurasian) Black Vulture	1
Egyptian Vulture	13
White-tailed Eagle	6
Osprey	55
Golden Eagle	1
(Eastern) Imperial Eagle	21
Lesser Spotted Eagle	1,814
(Greater) Spotted Eagle	74
Steppe Eagle	169
Short-toed Eagle	639
Booted Eagle	3,549
Red Kite	1
Black Kite	57,999
(Western) Marsh Harrier	4094
Hen Harrier	7
Montagu's Harrier	947
Pallid Harrier	510
Long-legged Buzzard	109
"Steppe Buzzard"	269,440
Rough-legged Buzzard	1
Honey Buzzard	394,425
Sparrowhawk	3,669
Northern Goshawk	12
Levant Sparrowhawk	3,286
Common Kestrel	43
Lesser Kestrel	90
Red-footed Falcon	265
Hobby	418
Peregrine Falcon	22
Merlin	8
Saker Falcon	3
TOTAL	741,692