WHAT'S HATCHING?

Official Newsletter of the Maryland & DC Breeding Bird Atlas 3 ISSUE NO 18 | OCT 2021





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BIRD OF THE MONTH

Cryptic birds like Least Bittern make detection difficult, but there are ways to increase your efficiency.

TIPS AND TRICKS

Kathy Calvert details how she tackled underatlased "fringe" blocks this summer.

OUT OF THE ARCHIVE

Drawing on 50 years of experience, Harry Armistead provided advice for boating on the Eastern Shore in *The Maryland Yellowthroat*.

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While checking the boxes in mid-June along her bluebird nestbox trail in Potomac, Anna Urciolo found a six-egg clutch. When she returned a week later, the clutch size had increased to nine—two more than the maximum clutch size reported in most references.

It's unknown whether all of the eggs were laid by the same female, but Anna hypothesized that the abundance of periodical cicadas may have influenced the clutch size. During the final check of the nest, two unhatched eggs remained.



"I sing of the Bay. my song is of the islands ere they wash away.

What creatures lived on Sharp's, Long, the Roystons, Nelson's, vanquished by the waves?

But gentle tides sough Spartina and Juncus marsh, skies full of Willets."

-- from Chesapeake haiku, by Henry T. Armistead





Least Bittern by <u>Suzette</u> <u>Stitely/Macaulay Library</u>



From the Coordinator

The new Peterson nest guide will be a great tool for atlasing.

In August, a new book, *Field Guide to North American Bird Nests*, was added to the Peterson Field Guide series. Covering more than 650 North American breeding birds, this new publication provides a welcome update to the eastern and western Peterson nest guides authored by Hal Harrison in the 70s.

The new guide, written by Casey McFarland, Matthew Monjello, and David Moskowitz, is brimming with photographs of nests, eggs, and the birds themselves. It has a substantial heft to it—its 500 pages weigh around 1.5 lbs-but it isn't oversized. Similar or indistinguishable nests are grouped together (for example, the three crossbills receive a single account). Species within a "group" (like gulls, or terns and skimmers) receive an introduction and then are sorted by nest type and habitat. This unfamiliar order often necessitates a trip to the index to find a particular species, but it aligns well with the goal of the book: identifying nests. Nest identification is challenging and overlooked, and seeing all the warblers that have "ground nests built with an outer shell of leaves" side-by-side is enormously helpful.

Unsurprisingly for a modern field guide, range maps have replaced range descriptions. However, the formatting of these maps is my biggest gripe with the new guide; square inches of blank space exist on nearly every page underneath these maps. Rather than appearing clean and spacious, the page layout somehow looks cluttered and disorganized—not to mention the additional weight that blank space inherently adds, antithetical to the purpose of a field guide.

The species accounts are often shorter than Harrison's accounts, even without the range descriptions. This may be because there is no "Notes" section in each account, a largely anecdotal section Harrison described as, "a bit of everything, I suppose". The accounts use italics effectively to emphasize key diagnostic features, but also rely on the taxonomic group's introduction. Information presented there is often not repeated later.

Curiously for a field guide, 10% of the book is devoted to a pair of introductory chapters. The first provides a broad summary of the evolution of nests and breeding behavior, while the second is a highly relevant overview of nest design and construction. In fact, to use the guide effectively, chapter two should almost be required reading.

Compared to the two other primary North American bird nest references, this new *Field Guide to North American Bird Nests* is (as the name

accurately suggests) a nest identification guide. The Birder's Handbook: A Field Guide to the Natural History of North American *Birds* is a reference tome bursting with information beyond species identification, rife with acronyms and symbols, but miles from the field guide it claims to be. Nests, Eggs, and Nestlings of North American Birds provides similar information on breeding behavior, but the detailed plates are focused on eggs and nestlings; nests are occasionally illustrated with sparse line drawings. Using this book to identify nests can be challenging, and Field Guide to North American Bird Nests fills this gap admirably well.

Overall, I like the new Peterson guide and think it is well worth the \$24.99 price tag, even if you already own the older Harrison guide. However, the size and weight of that Harrison guide is tough to beat, so that slimmer book will probably stay in my backpack, and I'll keep this new guide handy on my shelf.

--Gabriel

bird of the month: LEAST BITTERN

Least Bitterns are miniscule herons. If you haven't seen one, imagine a small heron, then make it smaller. And then a little smaller. Least Bitterns weigh about the same as an American Robin or a Virginia Rail—the thin, attenuated rail recalling the bittern's slender shape better than the paunchy robin. To contextualize their size another way, it would take about thirty Least Bitterns to equal a Great Blue Heron's mass (meanwhile, only fifteen or so chihuahuas are needed to match a large German shepherd's weight).

Their diminutive size allows them to move about in dense emergent vegetation. A marsh bird through and through, they may be found in freshwater or brackish marshes provided there are sufficient cattails, sedges, rushes, or arrowheads. Suitable habitat will also include woody vegetation and open water interspersed throughout the marsh. Stewart and Robbins (1958) reported that Least Bitterns were especially abundant in narrow-leaved cattail marshes. Searching for narrowleaved cattail observations on <u>Maryland Biodiversity Project</u> shows the cattail's range at a quad level (atlas blocks are ¼ of a quad), providing a useful map of potentially suitable habitat for observers to check for breeding bitterns.

Of course, getting to the appropriate habitat is only part of the puzzle; you also need to find the secretive bitterns. It's important that detections are maximized, so playback should be used if Least Bitterns have not been documented breeding in that block yet (conversely, if Least Bitterns *have* been documented with a breeding code in that block, then playback



Least Bittern breeding distribution map from the Maryland & DC Breeding Bird Atlas 2.

Least Bittern by Daniel Irons/Macaulay Library

FIND MORE BITTERNS

Watercraft provide unparalleled access to waterlocked locations and seldom-seen behaviors.

Between the first and second atlases, Least Bitterns were found in 30% fewer blocks. In the BBA2 species account, Lynn Davidson attributes this decline—at least in part—to reduced observer effort, particularly by boat. During the first atlas, Patuxent River and southern Dorchester County marshes received extensive boat searches, resulting in concentrations of Least Bittern Confirmations in these areas.

To that end, in the *From the Archives* section of this newsletter (October 2021) we have reprinted boating advice from Harry Armistead that was originally published in <u>The Yellowthroat</u>.

Now, a watercraft of some kind is not a necessity for finding Least Bitterns and other marsh birds, but it does provide more and better access to wetland habitats. As you'll read further on in this issue, Harry is an enthusiastic proponent of their benefits! should not be used). To use playback most effectively, Bogner and Baldassare (2002) recommend a broadcasting pattern of 15 seconds of the cooing call followed by 15 seconds of silence. This pattern should be repeated for at least five minutes. While they did not recommend specific times of day that playback was most effective, all of their playback trials were conducted between 5:30 and 10:00 in the morning or between 6:30 and 8:00 in the evening. Season matters though, and response rates are highest during the nest initiation phase. In Maryland, nests with eggs have been found from May 10 to July 12, so Bogner and Baldassare's recommendation of surveying between mid-May and late July might be slightly later than locally optimal; late April to early July might be more effective here. Any responses to playback can be coded as T (territorial).

Additionally, keep in mind that a Probable status is perfectly acceptable. There is no need to disturb the birds unnecessarily to try and Confirm them.

In Maryland and DC, Least Bitterns arrive in late April and begin forming pairs shortly after arrival. Males begin constructing the nest and will continue adding material to



Narrow-leaved cattail (*Typha angustifolia*) observations reported to Maryland Biodiversity Project. Darker purple rectangles represent more observations than lighter purple rectangles. Observations are depicted at the level of a USGS quadrangle topographic map.

https://www.marylandbiodiversity.com/quad/8275. Accessed September 29, 2021.



the structure throughout incubation. In productive habitat, Least Bitterns may be semicolonial. Their home ranges are about 25 acres, although this can vary by about 80%. They primarily eat aquatic invertebrates and small fish and amphibians, and they will even build foraging platforms at especially productive sites.

The nest is usually located within 30 feet of open water in a dense stand of tall woody or emergent vegetation. Typically, the nest will be six to thirty inches above water ranging from ankle- to waist-deep. The nest itself is a platform created by bending down existing vegetation, adding small stems and sticks on top, and crimping the surrounding plants into a canopy. The nest materials are added so that they radiate outwards, like the spokes on a wheel. As the nest's brood grows, the parents will use their bills to create holes in the nest for fecal matter to drip through.



Four to five pale blue or green eggs are laid at a rate of one per day; incubation begins after laying the first or the second egg. Both adults participate in incubating the clutch for 17–20 days. Since incubation commenced early in the laying process, hatching is asynchronous and takes three or four days. Although it would be quite rare in Maryland, American Coots have been known to parasitize Least Bittern nests. The bitterns are also known to nest near Boat-tailed Grackles, and benefit from the grackles' anti-predator vigilance and aggression.

If disturbed, the semialtricial chicks may leave the nest as early as six days old, but more commonly they leave around thirteen to fifteen days old. They will stick close to the nest site, not travelling much more than 50–100 feet from where they hatched. Parents feed their offspring by regurgitation, and will continue to care for their chicks until the chicks are able to fly at about a month old. Occasionally double-brooded, Least Bitterns remain in Maryland until late August or mid-September.

The cryptic nature of Least Bitterns means many of their breeding behaviors are difficult to observe. Raising a breeding status beyond Possible requires either intention or luck, so it is best to rely on intention to reach Probable status and on luck for any Confirmations. In other words, make a concerted effort to apply codes S7 (singing for 7+ days) or T when you find a Least Bittern, but don't worry if the bird isn't Confirmed in that block. Probable status is completely acceptable.

Courtship (code C) has not been described for Least Bitterns, so if you are lucky enough to observe this, be sure to include comments. Code P (pair) should only be used if a male and female are together; two bitterns calling are not a pair. The nest is built using vegetation at the site, so code NB (nest building) is a better choice than code CN (carrying nest material), and their porous nest construction eliminates any need to carry fecal sacs away (code FS). Adults feed their chicks through regurgitation, so you won't see them carrying food (code CF), and code FY (feeding young) should only be used after the chicks have left the nest. Chicks should always receive code NY (nest with young) when they are in the nest, regardless of other behaviors. Finding a Least Bittern in juvenile plumage is insufficient evidence for code FL (recently fledged young). There must be additional characteristics indicating that it is indeed recently fledged, such as down still on the feathers, begging behavior, or agitated parents.

Author: Gabriel Foley



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ATLASER SPOTLIGHT

Julie Maynard is from Frederick County. Newly retired thanks to COVID-19, she says she is now free to atlas. Before COVID, she published weekly community newspapers.



Where is your favorite place to atlas?

The Potomac River. I am surveying blocks from Antietam Creek in Washington County to the southern tip of Harrison Island near Leesburg.

What is the best thing about atlasing?

I've loved the responses others have given: it does slow you down, does make you look carefully at familiar birds, and you do learn amazing things about old friends. So I'll just add this: I love atlasing because it is a wonderful excuse to go exploring. I pore over Google maps, looking for disused lanes and odd bits of public land. I search for old cemeteries where I can leave a car. I obsess over how to reach the little islands in my stretch of the Potomac—I waded to one last summer, and am praying for low water again this year.

Have you been involved with any atlases prior to this one?

My mom had four blocks in the Illinois BBA in the 80s; helping her was an eyeopener. Since then I've done five-year atlases in four states: Maryland and DC BBA2, Pennsylvania, West Virginia, Loudon County, VA, and Virginia BBA2. Fun fact: the MD-DC BBA2 did full blocks along the state lines, so I worked in West Virginia and Virginia before those states' own atlases. A couple of blocks in the Knoxville, MD area I am atlasing for the fourth time in 20 years.

What's our biggest conservation issue?

Oh, the loss of habitat... anyone who did blocks in MD-DC BBA2 and is doing the same blocks again is probably struggling as I am with the constant reminders of what we've lost. The big developments going in on overgrown farmland... the lanes cut through previously unbroken forest... the buildings suddenly visible across the Potomac, where the Virginia side is not public land as it is on the Maryland side.

You can take binoculars, a field guide, and what other item?

Pocket-sized Lumix digital camera that is waterproof and drop-proof, and bright orange so it's easily found when I drop it.

Who would you go atlasing with?

David Smith, the Carroll County Coordinator—he makes birds HAPPEN.



What bird do you particularly like?

Any warbler that is making its summer home here makes me happy. Hey, it's not all migration, migration, migration.

What made you interested in birds?

When we lived on the Eastern Shore, my mother started my life list for me when I was six (No. 1: Downy Woodpecker).



TIPS AND TRICKS

Kickstart Atlasing in Washington County 'Fringe' Blocks—by Kathy Calvert

Since BBA3 began, I have been birding almost exclusively in Frederick County. A little more than half of the blocks in the county had been 'adopted' for the Atlas, and I was trying to get as many species coded in the uncovered blocks as possible. COVID-19 kept me close to home, and atlasing gave me a purpose. In the spring of 2021 I became fully vaccinated, and I began to feel the call to spread my own wings a bit further. Still compelled to atlas, I decided to explore under-covered blocks in my neighboring Washington County.

I made a plan to spend three days there beginning June 1, when a good number of species have reached their 'safe dates'. I explored eBird and made a list of six blocks with only a few or no coded species and few hours of effort already recorded in the Atlas portal. I called these "fringe" blocks, because they are partial blocks bounded by the border with West Virginia on the south and west, or by Pennsylvania to the north. My idea was to give these blocks a jumpstart for future atlasers. Several had been only visited once in 2020 (thank you, Peter Kaestner!) and two had not been covered in the previous BBA1 and BBA2.

I prepared by studying the maps of the blocks using the Atlas block maps, my ADC map for Washington County, and Google Maps. None of the blocks along the C&O Canal had direct access and I wanted to find the closest entry points that would save me some walking. I also looked for



apparent habitat variation, so I could cover rural, suburban and, of course, park-land areas where they existed in each block.

On June 1, I left home early and headed directly for the closest access point I could find to the Cherry Run SW block. Only a tiny portion of this block is in Maryland, covering about 0.6 mile along the C&O Canal towpath west of Indian Springs. The closest access is about 0.5 mile south, at the end of Mile Marker Lane. A similar length can be covered on the Western Maryland Rail Trail (WMRT); however, this segment is between the Canal and I-70 and the traffic noise is deafening. As it was, I quickly realized that the Brood X cicada outbreak was in full force here, and between the highway traffic and the cicadas, birding by ear was a challenge!

I spent over two hours on this short stretch, which is adjacent to the Potomac but out of sight of the river, through deciduous woods and alongside the Canal holding stagnant water. I had some nice Confirmations of breeding in spite of the ambient noise, with several species carrying food (Red-bellied and Downy Woodpeckers, Carolina Chickadee, Blue-gray Gnatcatcher, and Common Grackle). At the one powerline cut in the block there are large, tall electric towers carrying cables across the Potomac marked by huge colored plastic balls high up on the wires. European Starlings were carrying food into their nests inside these balls.

Carolina Chickadees, Carolina Wren and Northern Cardinal were all feeding young, and I spotted a Yellow-billed Cuckoo carrying nesting material. Several other species earned Probable or Possible codes, and another visit to this fringe block could easily pick up more Confirmations.

Next, I headed up to Cherry Run NW, a block bordering on Pennsylvania. I covered every road I could access in this block, and all atlasing was from the side of the road. The area has a nice mix of farm and grassland, patches of deciduous trees, and a small bit of willow/scrub habitat. BBA3 data for this block only showed five prior Confirmations of breeding. In a little over two hours I Confirmed 14 species, with my favorite being a pair of nest-building Orchard Orioles on Weller Rd. As I watched this pair, an agitated Baltimore Oriole tried to chase off the male, resulting in a Probable code for that species. I had noticed a Purple Martin or two fly



over, but didn't consider that evidence of breeding until I got almost to the Pennsylvania border, where, way back in a field, I saw a couple of older model wooden martin houses. Using my scope, I saw at least eight martins sharing the houses with several House Sparrows.

I had Possible and Probable breeding from a number of species that will require other visits for Confirmation. The pines along Maple Ridge Rd are likely to host breeding Pine Warblers (I heard at least two singing, Possible codes). The potential for Confirming grassland species like Grasshopper and Field Sparrows, Eastern Meadowlark, and Red-winged Blackbird is good in this block. I finished with 22 Possible and eight Probable species in the short time I spent here.

I was heading into the toughest time of day for birding, but I decided to forge ahead and check out the access to Great Cacapon NE, where I intended to bird the next morning. This fringe block was not included in either of the two prior atlases, and an earlier visit during BBA3 only yielded five Possible breeders. According to my ADC Map, there are two ways to approach the C&O Canal on this fringe block. The first access is at Pearre Rd, just west of Woodmont Rd. A second access is the Deneen Rd parking at Cohill, just off Willow Rd. After a quick stop for lunch in Hancock, I headed to Pearre Rd, where the parking is adjacent to the WMRT. A well-trodden path on the other side of the bike path is the way to the towpath across the dry and grass-filled Canal.

I continued on the towpath to the block line, using Google Earth on my phone to mark the block lines as I walked. After 0.9 miles, I entered the block at Lock 55 and kept walking. As is typical with the C&O Canal, the habitat was deciduous woods, and for much of the route, the Canal was filled with stagnant water. Heat, cicadas, and time of day were not my friends here as I walked about 1.6 miles within the block. Birding was tough, and for all my effort I was only able to Confirm three species (Eastern Phoebe, Tufted Titmouse and Carolina Wren) in about two hours. This poor result was my own fault. Had I come here early in the morning, I surely would have had better luck. I found a total of 16 Possible and five Probable breeders as well. I had to retrace my steps to get back to my car, and on the way I noticed that there was an access from the WMRT at Lock 55. (From the bike trail itself it is marked by a sign with information about Dam 6). This is a simpler way to access the block, although it involves the same amount of walking.

Outside of the C&O Canal and WMRT, only a sliver of Deneen Rd falls within Great Cacapon NE. The next morning, I tried to find that sliver, but my satellite would not pick up Google Earth and I couldn't figure out whether I was in or out of the block. I had covered the C&O Canal, but not the WMRT, and a future atlaser may want to try that next.

I began my atlasing in a fourth fringe block, Hancock SW, also on the C&O Canal bordering with West Virginia, early my second day. Access here from a small parking lot at the end of Willow Rd, just below the intersection with Deneen. The block border is about 0.2 miles downriver from the parking area. I walked about 2.76 miles but may have not have quite reached the southeastern border of the block because I lost satellite reception and could no longer see the boundaries on my phone.

This is a pretty stretch of the canal, and I had the entire route to myself except for passing a group of four bikers from Pittsburgh who were camping at the primitive campsite past Lock 53. The cicada chorus was less deafening this morning, and I heard or saw 36 species of birds in almost four hours. Some of my favorite birding experiences along here included spotting an adult Barred Owl (code H, since I couldn't see any other owls nearby), watching Acadian Flycatcher and Warbling Vireo carrying nesting material, and a Red-eyed Vireo building a nest. I also saw both Northern Parula and Louisiana Waterthrush carrying food. The songs

of Yellow-throated Warblers always make me smile, and I had two of these in large sycamores about a mile apart from each other. I passed the bikers, who had decamped, on my way back to my car, and they asked if I had seen the "crane", a Great Blue Heron that was fishing in the Canal. They had missed the two groups of Wood Ducks with fledglings. Other than that, I had no human contact in this block, and it was wonderful birding.

A bit more of this block can be seen from the WMRT, but the habitat would be similar, and not as close to the Canal. Instead, I spent another 20 minutes slow driving in woods and by a few scattered homes on Seavolt Rd, where I Confirmed Eastern Phoebe and coded a few more species as Possible breeders.

After a lunch break, I headed to Hancock NW, another block on the



border with Pennsylvania. Only four Confirmations had been recorded here prior to my visit (nine coded species in all), and I spent 2.5 hours picking up a total of five new Confirmations (35 coded species). There are very few roads in this block and a lot of land is marked "no trespassing". My favorite road here was Green Lane Rd, which had great shrub habitat with singing Yellowbreasted Chats, Orchard Orioles, Eastern Towhees, Common Yellowthroats, and Prairie Warblers, to name a few. The only Confirmation I made was Brown Thrasher, but I think it's quite likely these other species are breeding here too. Sandy Mile Rd heading north to Pennsylvania along a wood patch and adjacent to a nice stream looks good for breeding Wood Thrush and several other species, but there is no space to pull off, so a morning walk along here could be productive. My visit in mid-afternoon was not optimal for birding. The cicadas' incessant calling didn't help.

On my final morning in Washington County, I went into the Hedgesville NE fringe block, south of Clear Spring along the West Virginia border. In addition to a fine stretch along the C&O Canal, this block includes some farmland and fields so has the potential for a good amount of variety. I accessed the Canal at the end of Ashton Rd near Lock 46 and first headed northwest for about a mile to the edge of the block. I spent over two hours along this stretch, before retracing my steps and heading southeast to Dam 5, about ³/₄ mile. Dam 5 is not the edge of the block but I wanted to cover a variety of habitats so I didn't go further. I made a lot of breeding Confirmations

along this stretch of the Canal, but my favorite was probably the agitated adult Louisiana Waterthrush and as I passed quietly by, I saw a fledgling at the opposite side of the Canal, poking warily out from behind some debris. Because I had already stressed the parent with my presence, I moved out of the area pretty quickly. This was my first ever fledgling Louisiana Waterthrush. In the past I've only Confirmed them nest-building or carrying food. Very near Lock 46 I found a lovely Prothonotary Warbler and watched it repeatedly carry insects into a nest cavity in a snag. I also saw Wood Thrush and Warbling Vireo nest building, and Eastern Wood-Pewee and Blue Jay carrying nesting material.

I birded from my car on Dam 5 Rd, Gruber Rd, Ashton Rd, and Gift Rd to pick up grassland species like Redwinged Blackbird and Grasshopper Sparrow, and other common 'backyard' birds like Common Grackle, American Robin, Chipping Sparrow, American Crow, and others. I finished with 20 new Confirmations for this fringe block and 50 coded species.

I enjoyed my time trying to jumpstart a few blocks in Washington County. The cicadas made birding challenging, but I really liked having the C&O Canal largely to myself and traveling some of the more remote (with very few cars) areas in the county that I had little experience in. Atlasing is a pleasure anywhere, anytime, but I think going to blocks that are short on coded species and have few previous hours of effort is a good way to spend your time any day. Just pick a block you've never been to but that shows a need for Atlas effort, check out some maps beforehand, and go have fun for a day. You won't regret it!

Author: Kathy Calvert, Frederick County Coordinator



FROM THE FIELD

© George Jett

Red-bellied Woodpecker fledgling by George Jett







OUT OF THE ARCHIVE

Boating and Birding on the Eastern Shore

Armistead, H.T. 2002. Boating and Birding on the Eastern Shore. The Maryland Yellowthroat. 22(5):1,6-8.

How can water that doesn't chase the moon speak to the imagination? I had rather watch tides come and go from the merest muddy fingerling of a cove off a creek off a river off a bay off an ocean than own Golden Pond. What mattered to me as a boy was the fact that the scruffy water in Cambridge Creek was contiguous with, say, Portugal. —Novelist John Barth

I can never understand why more birders don't go boating. For half the price or less of your compact car you can have a small skiff, outboard and trailer. Much less if you canoe or kayak. These will all last many years with proper maintenance. My 14-foot Crestliner skiff I used for 38 years, its 18 H.P. Evinrude outboard and its trailer for 30. Go birding plus get moderate exercise exploring the hundreds of miles of shoreline on the Eastern Shore, much of which has never seen a birder. In general the farther farther south on the shore the less birded is the shoreline.

This article discusses small boating in general. Decide



where to go by consulting some of the references listed here. A lot of what is said below I also find useful if I am going on a pelagic trip, or just driving somewhere.

Do it now when you have four more years ahead for helping out with the Atlas and can poke into the hundreds of lovely areas that are inaccessible by car or even by hiking off the road. Canoers and kayakers can make a special contribution to atlasing. As one of my acquaintances once said: "As long as I am in a boat I don't care what I am doing." Boating is best when it is quiet but with movement still possible such as sailing or drifting.

No matter what the weather or situation, someone in a boat will almost always see birds that people on land will miss, even if the surface is dead calm and there are folks on shore scanning with good scopes. There is more out there than there seems to be. Often those 325 Long-tailed Ducks clamoring off our shoreline in the Choptank turn into 550 when I get out among them in my skiff. And where did that pair of White-winged Scoters come from? Once while fishing with friends just off our shoreline an immature Black-legged Kittiwake circled our skiff for a quarter of an hour, so close that we could see with unaided eyes that it had pink legs. The only Bay King Eider I have ever seen was one I almost caught in a crab net one August day at Nelson's Island.

Most of us who bird on the water use boats, ironically, to get to land: islands, points, and otherwise inaccessible areas. However, mid-Bay waters are worth investigating. Who knows what is out there? Groups of thousands of Long-tailed Ducks and Surf Scoters are an exciting spectacle, but often several miles from shore, as are pods of Common Loons. A few Wilson's Storm Petrels frequent the shipping lanes as far north as Talbot waters from late May into August. If you go watch out for the huge freighters steaming along faster than you are, although they don't look it. Gannets are a growing presence, all the way up to the Bay bridge to Annapolis. Hummingbirds and Merlins shoot over the widest expanses of the Chesapeake.

MAPS AND CHARTS. (see also under REFERENCES below). The DeLorme atlas (combined for MD & VA) plus the excellent ADC (Alexandria Drafting Co.) county atlases are very useful for boaters just as the nautical chart books ("Chesapeake Bay Chart Book" combined for MD and VA; also by ADC) are nice to have when you are on land poking around. Get them all whether you boat or drive. Too bad there is no ADC atlas for Somerset County, one of the state's most alluring boating counties, and under-birded. The ADC atlases have excellent indexes. The ADC "Maryland/Delaware State Road Atlas" is much more generalized than the county ones but still useful. It obviates somewhat the need to buy their numerous county atlases. These printed aids are available in good gas stations, book stores, marinas, and boating supply stores. All show launching ramp locations.

Even if you never leave home a good map is a thing of





beauty and feeds the imagination. Most of them overstate the extent of shoreline and land. Their indications of water depths near land should be used with caution. The Talbot County ADC atlas still shows Sharp's, Nelson's and the Royston Islands, beloved places that went under the waves decades ago. The official Maryland "Highway and Natural Resources Map" is good considering its genre (a folding, glove compartment aid) doing a fine job of showing state Wildlife Management Areas (WMAs) but merely lists launching site addresses instead of showing them on the map per se. None of these maps indicate that Barren, Spring and Watts (in VA) islands as well as Bishops Head Point are part of Blackwater NWR.

OWNERSHIP. You have a perfect right to boat just about anywhere in tidal waters except for a few places, such as the waters of Aberdeen Proving Ground. Be aware of where you are and do not land on any areas that are part of National Wildlife Refuges. Be discreet if near or in a WMA during the hunting seasons. Bloodsworth Island is lovely but was a naval bombing range for decades. Under no circumstances should one walk around on Bloodsworth—an admiral once wrote me that there are "countless rounds of unexploded ordnance" there. Most shorelines and islands everywhere else are privately owned. Use the same common sense as when you are exploring by car or on foot.

FOOD AND DRINK. For some reason to many people peanut butter and jelly sandwiches or ham and cheese (both on plain white bread) taste terrific in a boat, especially at sea. Pringles potato chips, mediocre at best, nonetheless provide salt on hot days, come in a container that keeps them intact, and taste good on a boat. Sweet Pepperidge Farm sugar and ginger cookies as well as wheat thins are great also. I find iced tea unsurpassed as a thirst quencher. Most of the old wives' tales and conventional wisdom about water and thirst have recently been largely refuted (i.e., if you are already thirsty it is too late to get rehydrated; you need to drink 8 glasses of water a day; caffeine is totally dehydrating, etc.). We get a lot of the water we need from food, especially fruits and vegetables, but even from bread. However, it is still crucial to stay well-hydrated with liquids and it is surprising how dehydrated one can get in winter. When it is cold, chocolate bars with almonds, pepperoni, chocolate chip cookies, trail mix type stuff, and Golden Fruit provide energy. I can eat healthy when I get back on shore.



MAL DE BAY. Small boating, except for very rare individuals, is not at all conducive to seasickness. I get sick often at sea on 40' head boats and the like but have never felt sick on the Bay in 50 years of small boating.

POSITIONING. The greatest stability is in the center of the boat or towards the stern. Sit up in the bow and if there are sizeable waves you get pounded. Try not to be too close to the noisy engine. If you have to stand be just aft of the grab rail around the center console. If the boat is pounding your rear will get pounded, too, if you sit on the gunwales or are forward of the center console. Better to stand, spread your feet some, and hold on to the grab rail, with both hands if it is rough. Otherwise, try not to stand too much in small boats.

APPROACHING BIRDS. Approach birds slowly and obliquely in order to get close to them and so as not to flush them. This is as true for a great raft of sea ducks as it is for a group of terns, gulls, and shorebirds on a sandbar. If you are a Long-tailed Duck it is a long haul to Axel Heiberg Island and you need your rest, Chesapeake mollusks, and unfettered, quality courtship time before you take off overland for the high Arctic. It is illegal to deliberately disturb groups of waterfowl. Doing so during the...sea duck hunting season...may expose them to even more steel shot than usual as they fly hither and yon. Unless you have legitimate banding or censusing responsibilities stay away from colonial birds. Flush them and predatory Fish Crows, gulls, and Boat-tailed Grackles will sometimes return to their nests before they do, not to mention the ill effects on eggs and young of cold or heat. In addition, while you are there is that much time that adults bearing food are kept from feeding their youngsters.

SUPPLIES. Anchor. Beverages. 7X or 8X binoculars. Cell phone. Companion. Compass. Dark glasses. Dip net. First aid kit. Fishing rod and a few lures. Flares. Flags. Flashlight. Fly swatter. Food. Food chest. Fuel tanks full. Garbage or waterproof bag. Gloves. Hammer. Hat with a broad brim. Insect repellent. Knife. Life preserver. Maps and charts. Matches. Basic medications plus any prescribed for you. Notebook. Oil (for the engine or, as with 3 in 1 oil, for lubrication). Pen and pencil. Pliers. Pole/boat hook. Rag. Rain gear. Reef shoes. Rope. Sun screen. Sponge. Swim suit. Tissue. Towel. Trash bag. Water. Weather radio. Wet Ones. Whistle.

Some of these are optional. Obviously, a canoer or kayaker doesn't have room for all this. However, many of these will fit together in a small bag. By flags I mean the thin metal rods with orange flags used at construction sites, or to mark anything. Place one at the waterline when you go ashore. If you come back an hour or more later you should be able to tell which way the tide is going. When I spent three days in my 16' 8" boat over Labor Day Weekend visiting 11 Bay islands I had a checklist of over 70 items. When a totally unforecast, moderately powerful storm struck at 2:45 AM, September 2, 2001, I was glad to have all of them, especially an extra anchor, rope, cell phone, flashlight, and rain gear. The garbage bags and the waterproof food chest were useful. In the distance then from Watts Island I could almost see one of the weather reporting sites at Accomac, which made no mention of this



storm, reporting clear, calm conditions only 15 miles distant. If all politics is local, so sometimes is the weather, especially on the Eastern Shore in the warmer months, when thundershowers or lack of them can be extremely local.

Simple supplies can make a huge difference. I once helped a waterman in a near wilderness setting who was idled and drifting. A cord had become wrapped around his propeller and, unbelievably, he had nothing to cut it with but I had my trusty Swiss Army knife. In the 1970s extra rope helped me tow in the man who sells fuel on Smith Island whose boat had broken down a mile from his town. Take enough food, drink and clothing for a day longer than you intend to stay, an extra change of clothes, too. Weather forecasts often are not as accurate or detailed for watery areas as for the mainland. Weather forecasts for the Eastern Shore often differ markedly from those west of the Bay, both in accuracy and with respect to the level of detail of the actual weather conditions. Landlubbers get much more detail. In the colder months expect the weather offshore to feel at least ten degrees colder than on land, much more so if there is considerable wind. If there is no wind, if you are rooster tailin' along at 20 mph the wind chill is huge.

One aspect of Chesapeake boating is reassuring. Often the water is shallow enough so that if something goes wrong you can slide overboard and wade ashore. The moderate tidal range of a few feet and the relative lack of rocks





Black-necked Stilt by Kim Abplanalp/Macaulay Library

makes for safer boating than, say, in Maine, as does the warmer water. Fog is relatively uncommon. Of course, the extremely shallowness can also be a hazard, prohibiting boating in some areas, and conducive to running aground. Always carry fresh, extra spark plugs, cotter pins, and shear pins if you use an outboard motor, and know how to change them.

SAFETY. Two years in the army and I got good and sick of safety lectures before every big weekend. You had to attend or you didn't get a pass. However, being on the water has an element of danger. It is probably not as dangerous as driving but when things go bad you may be alone in a remote place. Once on Adam Island I stepped on a big nail while wading ashore early in the morning. Off Off Cedar Island, VA, on a Christmas count our boatman, highly experienced, nevertheless hit a submerged sand bar during a storm. Thrown on my side, my arm required 17 physical therapy sessions. I helped carry the litter of a man with a propeller wound at Kiptopeke once whose right chest muscle was hanging by a thread. Fall overboard in winter you may have 15 minutes to live if you can't get out of the water. Leave your boat on a falling tide you may not get afloat for six hours or more.

Summer thunder storms can come up very unexpectedly. Some such storms on seemingly lovely, benign June days on the Bay have had winds in excess of 100 mph. If the weather, or tide, or losing your balance and falling overboard don't pose dangers, then colliding with a submerged log or some[one] on a jet ski or in a cigarette boat may. Don't be afraid but be respectful, cautious, and informed of the Bay environment. Aim to return to land with at least an hour of sunlight remaining.

WIND. Can be your friend or enemy. Refreshing in summer. Chilling in winter. There are many dangers to a following sea. It wafts you along but can come swamping over the transom. Be aware of the prevailing forecast wind direction. But out around the Bay islands wind is deceptive. Coming to a major island point you think when you get around it and change your course, say, 25 degrees, the wind direction you are subject to beforehand will change accordingly. Often it doesn't. The land mass, even a low marshy one, affects the wind direction.

Nevertheless, adjust your course to the prevailing wind direction and the tide. Going out to Bloodsworth Island on a high tide and moderate SW wind I will go south along the east and shallower side of Bloodsworth when the tide is up and be able to skirt the shore, on the island's protected lee side. My afternoon with the tide ebbing I can then return north in the deeper west side water and have the SW wind pushing me along some, even against the ebbing tide. If the tide to start with is low and the wind is easterly I can go down the deeper west side and be in the lee. Returning I may want to wait until the tide turns to have it behind me and return on the east side beating into that easterly wind. However, watch out for the east wind. It can mean bad weather is on the way. Some days may be tricky enough so that I visit only about half this island's shoreline.

TIDE. Usually a full or new moon means a higher tidal

range. East, southerly, or southwest winds keep water in the Bay and create above normal tides. A cold front with northwest winds, especially if one lasting a day or more, means lower, often much lower, than normal tides. On April 5, 1975, after several days of strong NW winds the closest water to the end of our dock was 168 paces from its end, 235 from our point, Lucy Point. Watch a cold front. It may mean winds too strong for safe boating. When you launch (or "put in", as boaters love to say) ask a waterman about conditions if there are workboats in the neighborhood. Most of us are weekend warriors. Watermen live (and sometimes die) on the water. They are usually helpful, friendly, and informed.

Tides are sometimes affected by distant weather systems. The so-called Perfect Storm off the coast of New England created tides so high that they even impacted the Chesapeake. The small fresh water stream ("Prothonotary Place") on Egypt Road north of Blackwater flowed backwards. The Little Blackwater River was so high then that it gently surged up the stream right into the Red Maple swamp there.



When boating be humble, cautious, and careful. Whether you are humble or not there will be times when any boater is humiliated and made aware that there is a lot they do not know or understand. The more experienced the boater the more they admit and realize this.

Clichés often help. If there are crab pots it is deep enough to boat in. If there are duck blinds it may not be. If you see waves breaking at a spot and none breaking near it that will be a shoal area, probably a sand bar. Conversely, just to confuse things, calmer areas often indicate shallows. Lightness of color under the surface, often a pale brown, usually means shallows. Visible sessile vegetation obviously indicates shallows. If it floats on the top partially the tide is low. If it is completely submerged the tide is high.





case of buoys, anchored from their base, they lean the way the tide is going, making a small but significant "wake". Pots have a wake also but if tied by their pointy end they face into the tidal current. Channel markers do not lean but still have this kind of wake. Pass crab and eel pots on their "downstream" side, otherwise you may involve your propeller with their cords. At slack tide (full low or full high) when the tide is still, which doesn't last very long, most of these clues do not apply.

Under some conditions (to name one: when a tropical storm is stalled off the Atlantic coast for a few days, the storm surge trapping water in the Bay) the day's two low tides may be so high they are as high, or rarely higher, than a normal high tide. The opposite can also be true, as

A falling tide leaves a diffuse, deep, wet area on pilings and to a lesser extent on rocks. On a rising tide the waterline at the top of these wet areas is indicated by a much neater, thin demarcation line. In still, shallow water if the tide is rising off of exposed mud there will usually be a dusty, scummy surface or film with floating particles. This is absent on a falling tide. Look at the shoreline. If the water is up several inches above the base of the marsh grass obviously the tide is high. If there is exposed sod bank it is low. If there are rocks or rip rap and the tide is out a distinct black band a foot or more high will appear above the water surface on the rocks, often visible for hundreds of yards.

Watch the buoys, crab pots, and floating markers. In the



for example after two or three days of a powerful northwesterly cold front, there can seem to be no high tide at all. High or low tides are relative.

Far up protected tidal guts where there may be at low tide exposed, very flat sandy or muddy areas you can actually see the tide coming in at about a horizontal inch a second. In completely protected water away from any winds if you watch floating particulate matter or underwater grasses you will see them gently wafting in the direction the tide is going. There will be other times when you (or anyone else) will not know what the Hell is going on. In some of the more complex tidal guts, if one is unfamiliar with them, it may not be evident which way the tide flows out or in.

Why is tide so important? Chesapeake Bay is so shallow





that the tidal range of a few feet makes a tremendous difference. Run aground and become fast at high tide and you are in trouble. It's not going to get any deeper. Run aground at low tide and it will. There are places where I have hit bottom with my small skiff over a mile from the nearest land. Some of what is said above may seem like an insult to the intelligence. Is it really that difficult to tell what the tide is doing? Sometimes. Often.

HUNTERS, ANGLERS, AND WATERMEN. Most of these folks are more heavily invested in what they are doing than you are. Give them a wide berth. Watch the other boats. If they are chumming for rock they may attract birds. A gunshot or two and those wigeon you didn't see are in the air, high, calling. If the boats all go off towards port give the sky another look. For some reason Eastern Shore summer thunder storms often appear in the distant west at midday, move gently north and east deceptively and almost imperceptibly, and then sometimes descend south upon you. There is nothing sweeter than hearing Seaside Sparrows and Marsh Wrens singing and Willets calling early on a June evening in the renewed, bejeweled sunlight following an afternoon downpour when everything is clean and dripping with dewy water drops and shining in the bright light... as long as you made it to shore safely before the storm hit.

FATIGUE. Fatigue leads to errors of judgment, plain old mistakes. You will become more fatigued in a boat than in an equivalent time period on land, even though (because, actually) you will often be more stimulated. The constant motion of boats and your body's reaction to it, continually balancing, is a subtle but inexorable, true exercise and is fatiguing. So is being out under the sun. The glare tires the eyes. Often you will postpone eating or drinking, a bad situation, being distracted by the scenery or because you are concentrating on a safe passage and looking for landmarks. The drone (or roar?) of the engine is tiring. This translates into drowsiness when it is over and you may have to drive an hour or more to get home. As an analogy, driving a car in a heavy wind and/or slanting rain is fatiguing and the many adjustments you have to make on the steering wheel to compensate for the wind are demanding. Driving a car in a strong wind shares many similarities with boating. You're in air rather than water currents.

CLOTHING. Keep the sun off you. The rate of melanomas and some other skin cancers is skyrocketing. Due to ozone problems? Who knows? Wear long-sleeved shirts and fulllength trousers. Put on sun lotion before you start and every few hours afterwards. My dermatologist tells me that even though I am under my boat canopy and wear a widebrimmed hat the glare reflected from the water can cause skin damage. A tan looks great and I used to love it. Do it enough and it can kill you. I like to wear low cut rubber "Wellington" boots. Flies love boats and they love ankles, especially wet ones, and can get you right through cotton socks. Cheap white cotton gloves, sold in every supermarket, protect your hands from bugs and the sun and are guite comfortable in all but the hottest days. "Reef shoes", available in stores with diving supplies, stretch over your feet if you go wading in our Bay, which is full of oyster shells, crabs, Cow-nosed Rays, glass, and nails. Take clothing along that will keep you comfortable at 15 degrees colder than the forecast. You can always take it off.

Most important of all, and something I am often guilty of not doing, is to try not to boat alone. Take a partner along.



On the other hand, it is uplifting and stimulating to be alone on the water, a little scary, a little dangerous. But it can be very dangerous. At least let someone know when and where you are going. I always call home midway through the day as well as when I have returned to the landing. If you are boating for more than a day leave a note on your dashboard saying where you are headed, what your boat looks like, and when you expect to return with an emergency phone number and contact. Once when I went out for a week after a few days the watermen called in my car license plate to the state police, thinking I was in trouble.

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