

eBooks and eReaders

In my humble opinion, ebooks and ereaders are the best invention since the ice cream cone.¹ Having multiple books with me *at all times* is something young Michelle dreamed of while running around with pockets bulging with paperback books.

But in addition to always having a book available, ebooks have many other advantages, such as starting a book on your smart phone, and then seamlessly picking up the story on your ereader. eBooks allow you to change the text size, so you don't have to hunt for your reading glasses. eBooks are backlit, so if you fall asleep reading, you don't have to wake up to turn off the light. And when you fall asleep reading, ebooks can keep you from completely losing your place.

So, what should you know about ebooks and ereaders?

The first important thing to be aware of is that fact that most ebooks and ereaders are NOT cross-compatible.

Books purchased on the *Apple platform* can **ONLY** be read in the iBooks app on an **Apple** device. However, books purchased on platforms like Smashwords can be transferred to and read on **any** ereader, and most any device.

There are multiple platforms for purchasing ebooks, and there are multiple ereaders, most tied to a specific ebook format. It's important to know what platforms -and devices—are cross compatible before you purchase an ereader, or even a bunch of ebooks.

Before you jump in with both feet, you'll want to decide what "ecosystem" works best for you. Hopefully these sessions and this document will help you make that determination.

Consider: if you primarily read library books, the BOOX and Kobo ereaders may be better choices, as you can install the Libby app and borrow and read library books directly from your device. Many library books can be sent to a kindle, however, kindles don't have the Libby app natively available.

The silence purred at them as Wonse talked. They avoided one another's faces, for fear of what they might see mirrored there. Each man thought: one of the others is bound to say something soon, some protest, and then I'll murmur agreement, not actually say anything, I'm not as stupid as that, but definitely murmur very firmly, so that the others will be in no doubt that I thoroughly disapprove, because at a time like this it behooves all decent men to nearly stand up and be almost heard . . .

But no-one said anything. The cowards, each man thought.

And no-one touched the pudding, or the brick-thick chocolate mints served afterwards. They just listened in flushed, gloomy horror as Wonse's voice droned on, and when they were dismissed they tried to leave as separately as possible, so that they didn't have to talk to one another.

[2]

eBooks

What are ebooks? ebooks are electronic files formatted (for the most part) to be read on a small handheld device, or on a computer screen in an ereader program / app.

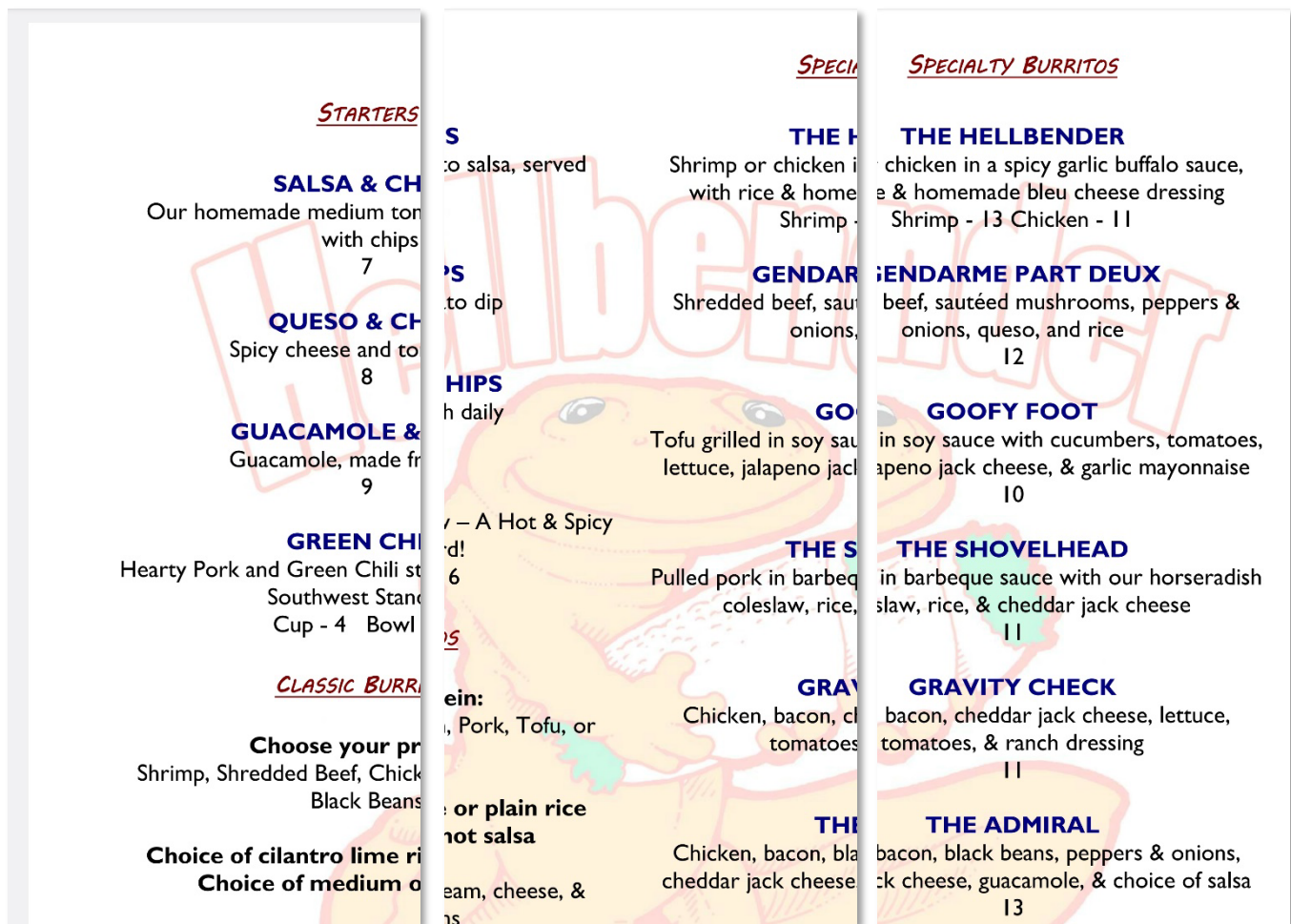
Reflowable Text

What makes ebooks different from other types of electronic files is that they are *reflowable*: they adapt their presentation to the device.

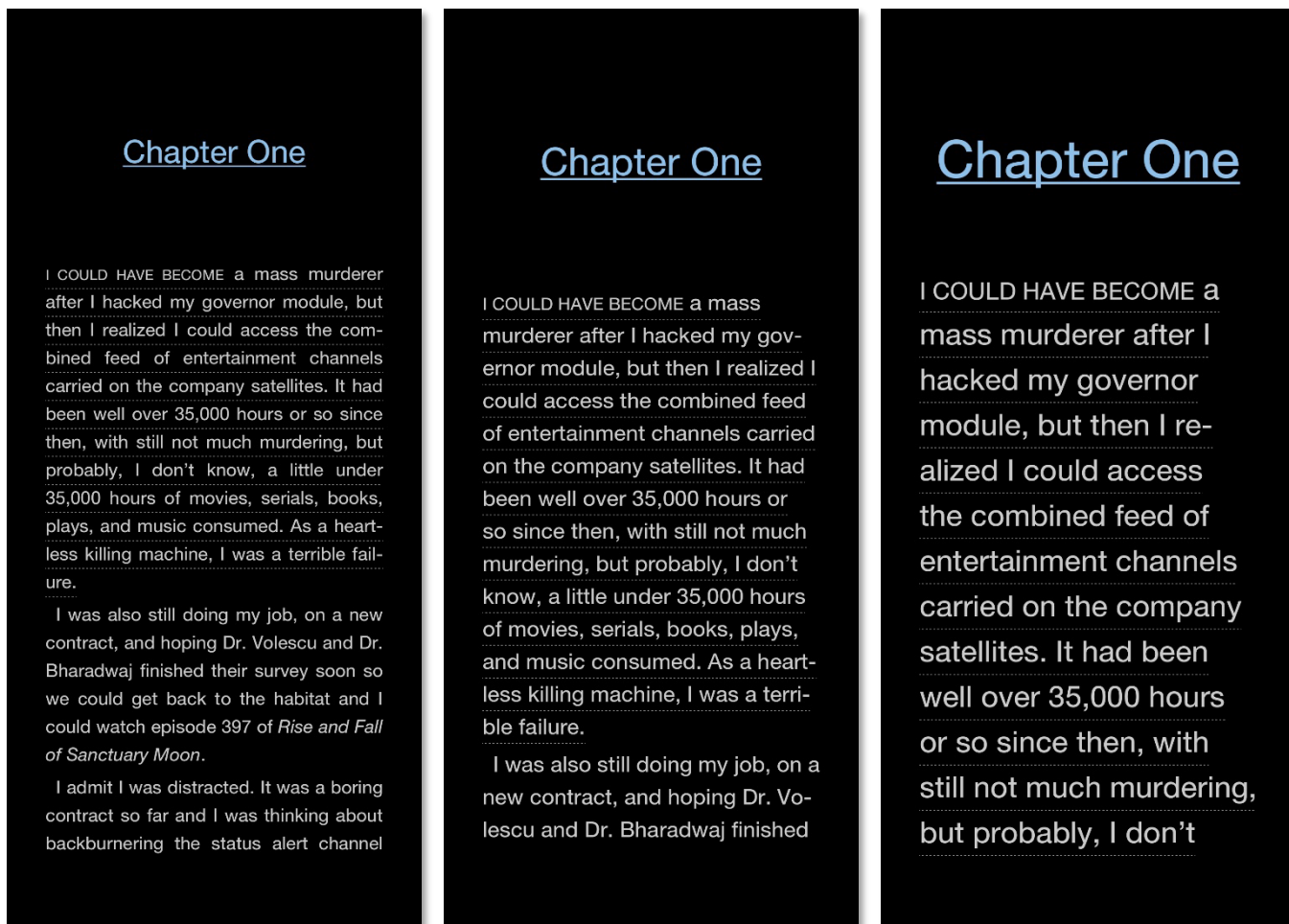
The opposite of reflowable is fixed-layout.

When you open a pdf on your phone, you usually must scroll around to read the entire thing.

Below is a pdf menu as it appears on my phone screen; each image is when I scrolled over to read more text.



With reflowable text, when you make the text bigger, text wraps to fit the new size and the overflow text moves to the following page.



Regardless of what device you use, most ebooks will be easily readable, no matter how small or large you make the text.

[3]

Notes

I discovered that I absolutely *love* the highlighting and notes features of ebooks.

In school you used highlighters to mark important passages in textbooks; highlighting for ebooks is the same thing, only much easier to erase.

Obviously, highlighting is great for non-fiction—I'm constantly coming across facts I want to remember. But I also love it for fiction.

I've frequently read lines and passages that have stuck in my mind for weeks—or even years—and highlights allow me to more easily find those lines and passages later.

I spent weeks trying to remember a line from a mystery that referenced the Colts leaving Baltimore in the middle of the night. It took a bit, because I guessed wrong on the author, but eventually I found my quote.

(M)y career plans don't include a scorched earth policy. I want to leave on a high, not sneak away in shame like the Colts out of Baltimore.

-- *Murder in G Major* by Alexia Gordon

And I didn't have to pull half the books out of my bookcase and flip through them to find it.

hadn't messed with their code. I kept an eye on him through one of the drones. He kept looking at me, or trying not to look at me, which was worse. I didn't need the distraction right now. When the next attack came, it was going to be fast.

“I do think of it as a person,” Gurathin said. “An angry, heavily armed person who has no reason to trust us.”

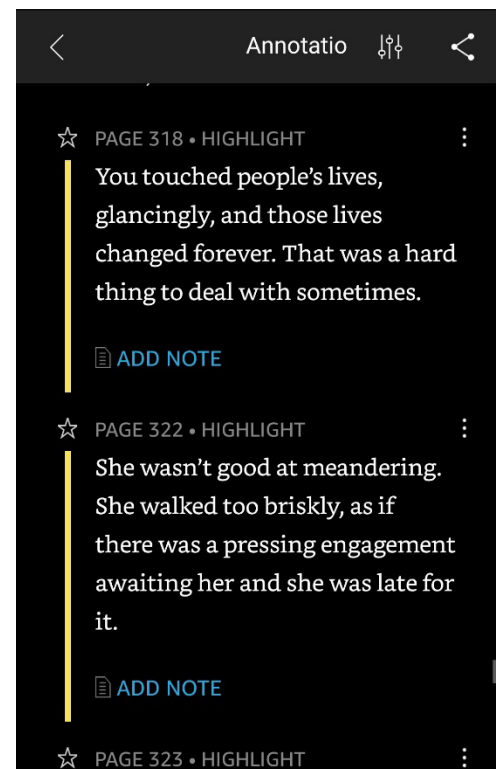
“Then stop being mean to it,” Ratthi told him. “That might help.”

“They know their SecUnits successfully gave our SecUnit the combat module,” Mensah

Page 96 of 150

60%

[3]



[4]


DRM

The biggest thing that affects how you can read an ebook is DRM (Digital Rights Management). DRM came from the 1998 DMCA (Digital Millennium Copyright Act). You might remember Napster, a music file sharing service, from the early 2000s. People (mostly teenagers and college students) shared music freely on such sites, which meant [people were not purchasing music](#).

DRM “locks” content so it can’t be freely shared (thus stealing income from the artists). Unfortunately, the need to protect artists’ rights and income affects how the end user (you) can read locked content, so DRM affects how you are able to read a book you have purchased.

Whether a book has DRM applied is up to the publisher and the author.

At the Publisher's request, this title is being sold without Digital Rights Management Software (DRM) applied.

 Read less

There are programs that allow you to remove the DRM from many types of books—in fact, I use one myself so I can read my books on whatever devices I want. But you should be vigilant in checking “free” ebooks to make sure the author is getting paid for their work. (Authors—especially aspiring authors—often participate in giveaways, you can often check an author’s website for sales and giveaways.)

eBook File Types

There are many ebook file types. Some of the most common are:

Adobe Digital Editions (ADE)
Adobe Proprietary
DRM

EPUB (Electronic Publication)
Standard of International Digital Publishing Forum

MOBI (Mobipocket)
Amazon format (deprecated)

AZW / AZW3 (Kindle File Format)
Amazon proprietary

Some digital book sellers, such as Apple iBooks and Amazon Kindle have their own proprietary formats. Other booksellers use standardized formats like EPUB.

eBook Stores

There are a multitude of stores selling ebooks. But all ebook stores are not the same, and where you purchase your ebooks affects how you can read them.

Some books, like an EPUB book without DRM purchased from Smashwords, can be read on any device. Others, such as Apple’s iba can only be viewed on an Apple device in Apple’s iBooks app.

So before you purchase a lot of ebooks, you’ll want to consider how you are planning on reading your digital books.

ebooks.com

ebook.com sells books in Adobe Digital Editions (ADE) format with DRM applied. These books can be read **ONLY** on the Ebook Reader mobile app, or the Ebooks web-based reader.

Alibris

Alibris sells books in the EPUB & PDF formats with DRM to most books. These books with DRM can be read **ONLY** on the Alibris VitalSource Bookshelf smartphone / tablet app or computer app. Additionally, you can **ONLY** read a book on two devices at any time.

Amazon Kindle

If you have heard of any kind of ereader, it is likely the Kindle. Books purchased from the kindle store can be read on the Kindle phone / tablet app, the Kindle desktop app, the Kindle Web Reader, and any Kindle ereader. Additionally, it syncs reading location across devices, including audio books purchased from Audible.

Apple Books / iBooks

Books purchased from the Apple Books are not accessible anywhere **EXCEPT** on Apple devices, including the iPad / iPhone app, the iBooks Mac app, and the iBooks watch app. The app does, however, sync reading location across devices.

Barnes & Noble NOOK

ebooks purchased from Barnes & Noblr and be read on any NOOK ereader, NOOK for the Web, and the NOOK smartphone / tablet app. These apps allow you to sync reading location across device.

Google Play

Google Books uses several different formats including EPUB and PDF as well as ASCM, which requires Adobe Digital Editions to read. These books can be read on the smartphone / tablet app, a computer app, and in many instances as a file that can be downloaded. The app will sync reading location across devices.

Rakuten Kobo

The company Rakuten sells the Kobo ereader, and ebooks that can be read on any Kobo device as well as the Kobo phone / tablet app. The Kobo desktop app, and the Kobo Web Reader. Your reading location will be synced across devices.

Smashwords

Smashwords is an independent ebook seller that does not have an associated ereader or proprietary app. Once you purchase an ebook you download the book (primarily in EPUB format) and then transfer to your ereader or any device that has an app capable of reading EPUB files. All files are without DRM.

eReaders

An ereader is a device dedicated to reading books.

You can read books and magazines on tablets or phones or computer screens, but they're not quite the same as reading a book.

I find ereaders as immersive as reading a paper book, only without the disadvantages of my hands aching after holding a paperback open for hours, or losing my place when I accidentally drop my book.

Although an ereader as it comes out of the box is clearly an electronic device, a variety of covers exist from plain protective covers to fancy personalized leather covers that make the experience more like holding and reading a book.

eInk

What makes ereaders feel like “real” books rather than a computer screen is eInk.

You've heard that using [electronic devices before bed interferes with sleep](#). However, [eInk devices do not seem to have those problems](#). Which means you can read yourself to sleep and not worry about sleep interference—or dropping the book and completely losing your place.

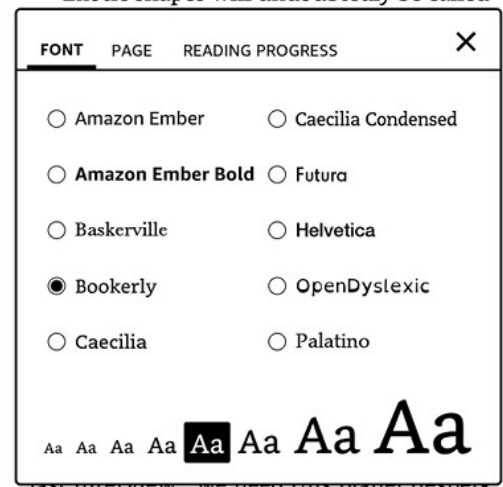
eInk (like other digital devices) is of course reflowable, but it also allows you to easily change book settings on the fly.

Don't want to wear your reading glasses? Change the font size. Want to read in bed without disturbing your partner? Change the font size and the lighting. There are even font faces that—combined with margins and line spacing—can [make reading easier for those with dyslexia](#).

Best of all? Lower vision readers are no longer limited to the somewhat sparse availability of large print books, since they can personalize their device to meet their needs.

Ilg flowed hastily back into proper Radio-man's shape.

“Exotic shapes will undoubtedly be called



last interview, “we need this planet desperately.”

“Yes sir,” Pid had said, standing at full

19 mins left in chapter

19%

eReader Brands

There are a variety of eReaders available for purchase in the US. I'm going to show you some of the most popular, with pictures of some of the ones I own and use.



From the left: Boox Note Air2 Plus, Kindle Oasis, Kobo Libre 2, Kindle Paperwhite

These are your primary ereader options in the US:

- [Boox](#) (independent)
- [Kindle](#) (Amazon)
- [Kobo](#) (Rakuten)
- [Nook](#) (Barnes & Noble)

Kindle dominates the market for ereaders, and for good reason. Their devices are sturdy and well made (I can't count the number of times I've dropped a Kindle onto my hardwood floors). Plus, if it's an ebook, it's usually available from Amazon.



Left: Kobo Libre 2. Center: Kindle Oasis. Right Kindle Paperwhite

Kindle, Kobo, and Nook have ebook stores that will send purchased books directly to your Kindle, Kobo or Nook ereader. Other ereaders (or books downloaded from other retailers) require you to transfer the books to the device.

Most importantly (or perhaps dangerously) ebooks come with instant gratification. Finished book four of a series? Immediately purchase and start reading book five! No waiting until the bookstore has opened (assuming that book is even available at your local bookstore).

What ereader Should You Choose?

What ereaders have I used? (deep breath): Kindle Keyboard, Kindle Paperwhite (multiple versions), Kindle Voyage, Kindle Oasis, Nook 1st Edition, Kobo Libra 2, Boox Note Air 2 Plus.

My favorite: the Kindle Voyage, which they discontinued. (sigh)

How do you decide which ereader is for you?

First you have to determine what factors are most important to you: Size? Weight? Battery life? Physical buttons?

I prefer smaller, lighter ereaders because they are easier on my hands when I read for several hours. I also like physical buttons, because I find them easier to use one-handed.

Lower vision readers may prefer an ereader with a larger screen, allowing more words on the page when using an extra-large font size.

If you are planning on using your eInk tablet to take notes, such as the Kobo Elipse, Kindle Scribe, Boox Note Air, then you may want to consider an ereader with a larger screen.

Here are some specs for a few of the more popular ereaders currently available.

BOOX Note Air2 Plus

Screen size: 10.3-inch
Weight: 445 g / 15.7 oz
Storage: 64 GB
Touchscreen + Stylus

Nook GlowLight 4

Screen Size: 6-inch
Weight: 170 g / 6 oz
Storage: 32GB
Touchscreen + Buttons

Kobo Libra 2

Screen size: 7-inch
Weight: 215g / 7.6 oz
Storage: 32GB
Touchscreen + Buttons

Kindle Oasis

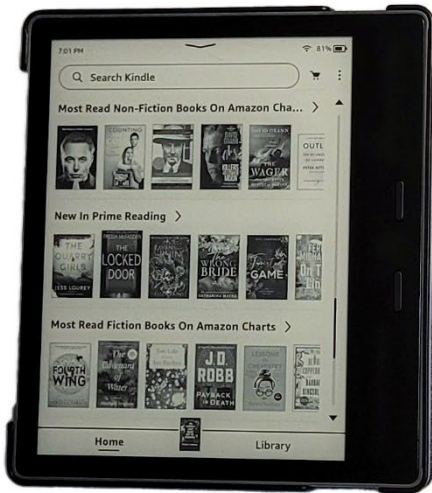
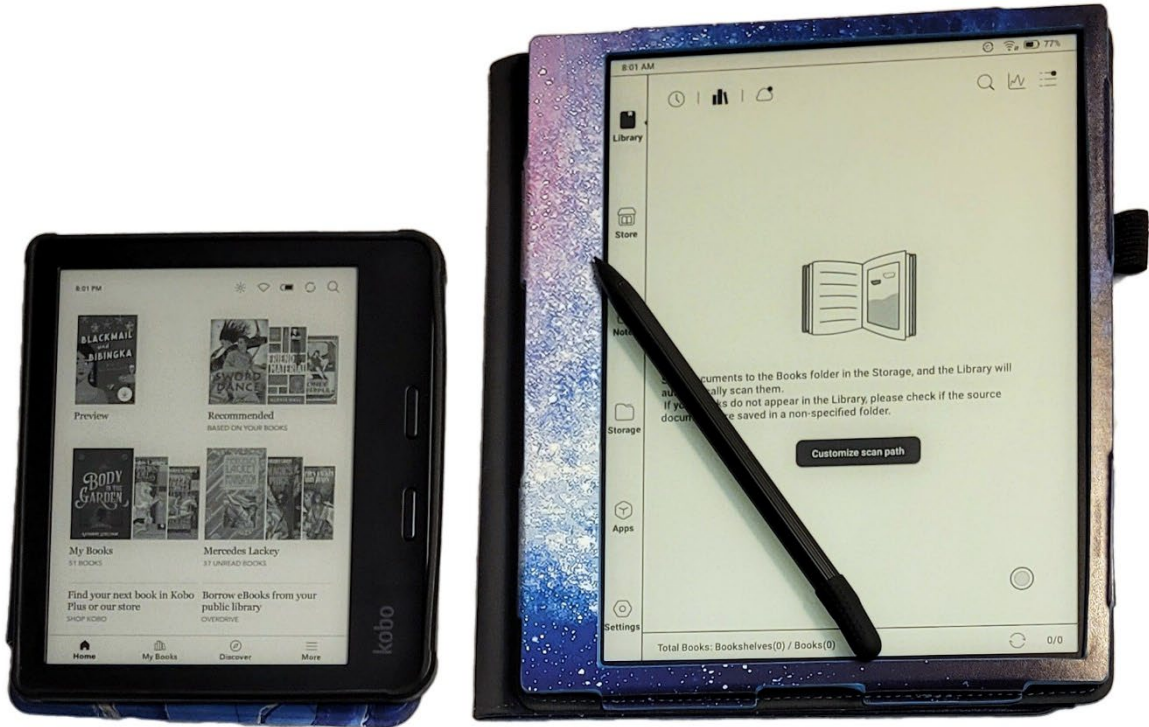
Screen size: 7-inch
Weight: 188 g / 6.6 oz
Storage: 4 / 8 / 32 GB
Touchscreen + Buttons

Kindle Paperwhite

Screen size: 6.8-inch
Weight: 205g / 7.2 oz
Storage: 8GB / 16GB
Touchscreen

One thing to note about all the above ereaders is that they are **NOT** color—black and white only.

If you often read magazines or comics or picture books, you may want to stick with a tablet (like an iPad or Kindle Fire) or invest in one of the new color eInk readers.



Clockwise from top left, Kobo Libre 2, Boox Note Air2 Plus, Kindle Paperwhite, Kindle Oasis

Other Considerations

The measurements are for “naked” ereaders. However, I highly recommend getting a case for your ereaders. First, you will want to protect the device—you don’t want to shove your ereader into a bag full of loose and pointy or sharp objects. Second, most ereaders have a magnetic on/off switch, so when you close the cover, it puts the device to sleep; when you open the cover, it wakes up the device.

I find book-type covers make reading one-handed much easier, however, there are also easel covers, which allow the book to stand up on its own (instead of having to lean it against a cereal box at the breakfast table).

Battery life is important. If you read a lot, you might not want to have to charge your ereader every other day, although you do get a low battery warning before the device shuts off.

All the devices I have charge with a micro-USB or USB-C cable, allowing you to use a portable charger if your battery runs low.

Like all other electronic devices, you can conserve battery power by turning off the wireless, turning down or off the backlight, or putting the device into airplane mode. Also, like other electronic devices, the batteries do not last forever and cannot easily be replaced.

Most sellers have trade-in programs for tablets and ereaders that might give you credit towards the purchase of a new device, and otherwise will recycle the device for you.

Something else to note: If you use an older ereader, you may note a delay/lag for page turning you won’t encounter on newer ereaders. It doesn’t make the experience slower than reading a paper book, but if you are a fast reader, it might be noticeable,

Comparisons

I have taken pictures of ereaders I own, and I have looked up the information for the most popular Nook, the GlowLight, to give you an idea of its comparative size.



	BOOX Note Air2 Plus	Kobo Libra 2	Kindle Paperwhite	Kindle Oasis	NOT SHOWN Nook GlowLight 4
Screen	10.3"	7"	6.8"	7"	6"
Weight	15.7 oz	7.6 oz	7.2 oz	6.6 oz	6 oz
Device Size	9 x 7.7	6.38 x 5.71	6.9 x 4.9	6.3 x 5.6	6.9 x 4.9
Thickness	0.23"	0.35"	0.32"	0.3"	0.2"
Resolution	227 dpi	300 ppi	300 ppi	300 ppi	300 ppi
Storage (GB)	64	32	8 or 16	4, 8 or 32	32
Page Turning	Touchscreen + Stylus	Touchscreen + Buttons	Touchscreen	Touchscreen + Buttons	Touchscreen + Buttons
Other	USB-C, Libby App	USB-C, Bluetooth, waterproof, Libby App	micro-USB OR USB-C + Bluetooth	micro-USB, Bluetooth, waterproof	USB-C

Weight: GlowLight 4, Oasis, Paperwhite, Libra 2, Note Air2 Plus

Screen Size: GlowLight 4, Paperwhite, Oasis, Libra 2, Note Air2 Plus

Storage: Paperwhite, Oasis, GlowLight 4, Libra 2, Note Air2 Plus

Thinnest: GlowLight 4, Oasis, Paperwhite, Libra 2, Note Air2 Plus

Smallest: GlowLight 4, Oasis, Paperwhite, Libra 2, Note Air2 Plus

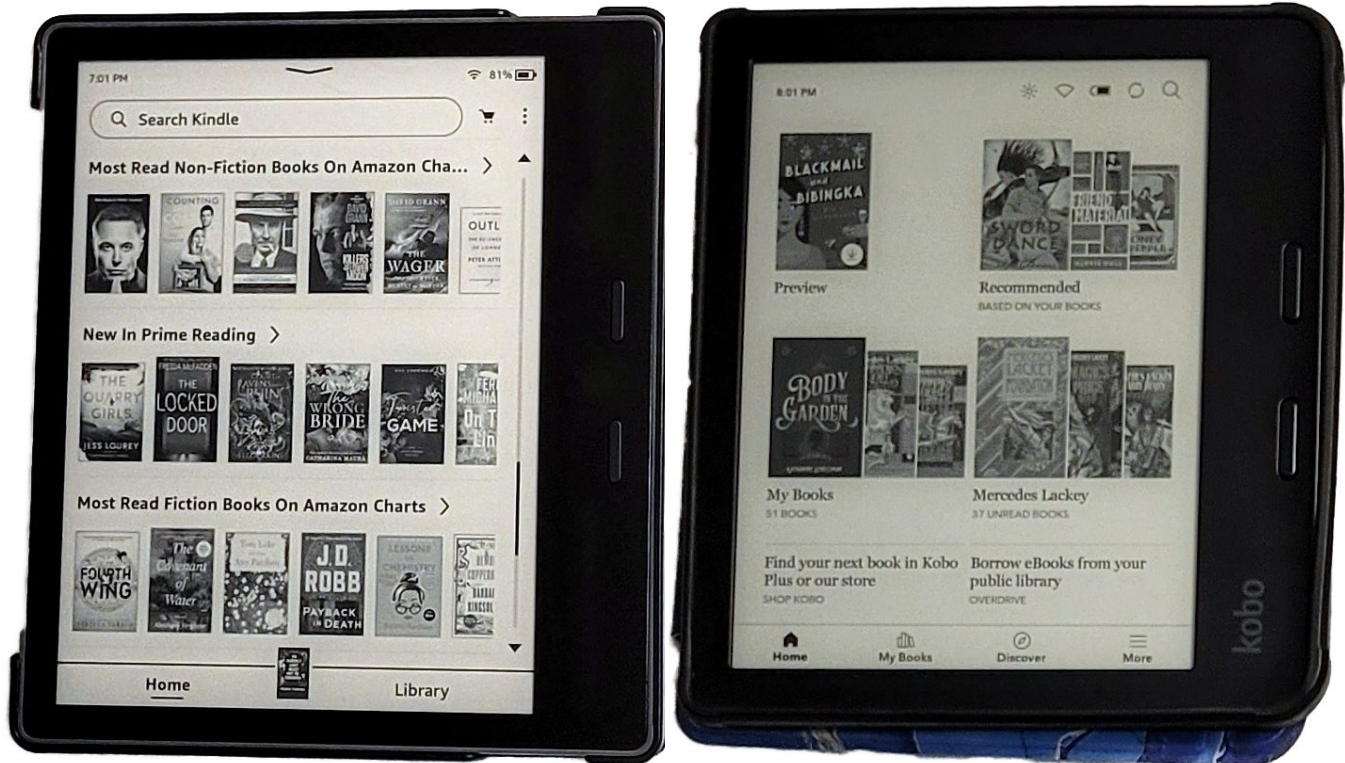
Screen Size to Device Size: Oasis, Note Air2 Plus, Libra 2, Paperwhite, GlowLight 4



Left: Kindle Oasis. Right: Kindle Paperwhite

	Kindle Oasis	Kindle Paperwhite
Screen	7"	6.8"
Weight	188 g / 6.6 oz	205g / 7.2 oz
Length	6.3"	6.9"
Width	5.6"	4.9"
Thickness	0.3"	0.32"

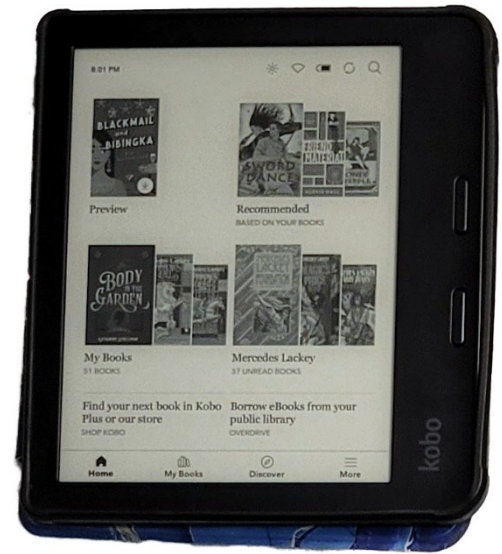
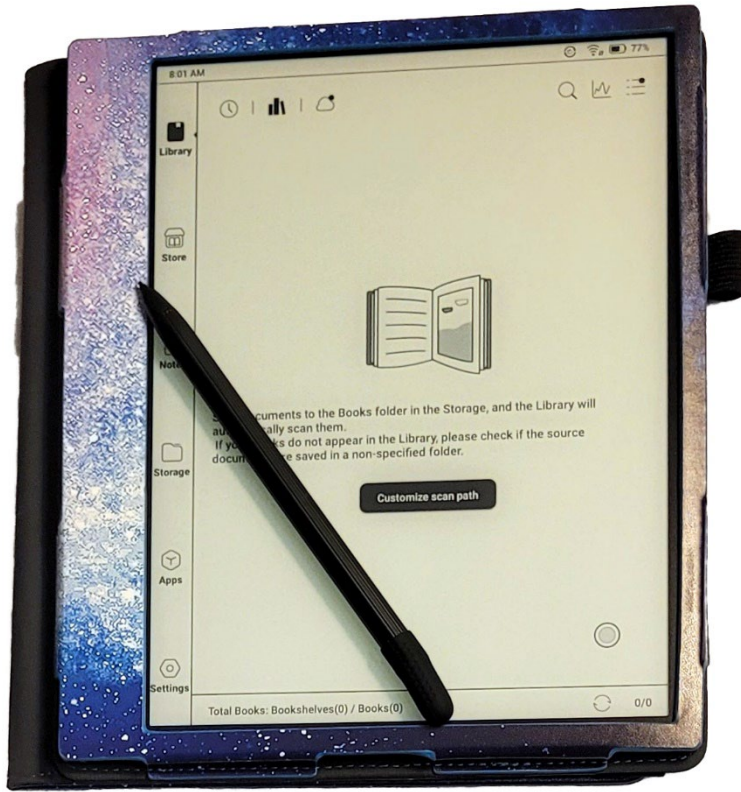
The Kindle Oasis has physical buttons, and the screen automatically flips when you rotate the device 180°. The paperwhite does not have physical buttons and the screen does not automatically flip when the device is rotated.



Left: Kindle Oasis. Right: Kobo Libre 2

	Kindle Oasis	Kobo Libre 2
Screen	7"	7"
Weight	188 g / 6.6 oz	215g / 7.6 oz
Length	6.3"	6.38"
Width	5.6"	5.71"
Thickness	0.3"	0.35"

Both the Oasis and Libre 2 have physical buttons, and the screens automatically flips when you rotate the devices 180°.



Left: Boox Note Air2. Right: Kobo Libre 2

BOOX Note Air2 Plus Kobo Libra 2

Screen	10.3"	7"
Weight	445 g / 15.7 oz	215g / 7.6 oz
Length	9"	6.38"
Width	7.7"	5.71"
Thickness	0.23"	0.35"

I know people say they love the smell and feel of books, but for avid readers, an ereader can be a life changing device, with their light weight and changeable fonts. And although you can't share physical books with family, if you share an account, they can have access to all the books in your library—even one you are currently reading.

Resources

Libraries

[Overdrive](#)

[Libby \(Libby app\)](#)

[Boox with Libby](#)

[Kobo and Libby](#)

[Morgantown Public Library](#)

[Charleston Public Library](#)

[Kanawha County Public Library](#)

[Marion County Public Library System](#)

[WV Deli](#)

[Library Extension](#) Browser Add-On

eBook Sellers

[Alibris](#)

[Amazon Kindle](#)

[Apple Books](#)

[Barnes & Noble](#)

[ebooks.com](#)

[Google Play](#)

[Harlequin](#)

[Rakuten Kobo](#)

[Smashwords](#)

[Android ebook Converter](#)

[Calibre](#)

[DRM](#) (Electronic Frontier Foundation)

[Five ebook Formats and How to Find the Best Style for You](#)

[How to Responsibly Recycle Your Ereaders](#)

[CloudLibrary](#) (No WV libraries available)

[Nook & Cloud Library](#)

1. The first ice cream cone was produced in 1896 by Italo Marchiony in the late 1800s. An Italian immigrant, he invented his ice cream cone in New York City and was granted a patent in December 1903.
2. *Guards! Guards!* (1989) Sir Terry Pratchett
3. *All Systems Red* (2017) Martha Wells
4. *The Lions of al-Rassan* (1995) Guy Gavriel Kay
5. *Murder in G Major* (2016) Alexia Gordon

Please Support OLLI@WVU!

Osher Lifelong Learning Institute
Mountaineer Mall Unit C-17
PO Box 9123
Morgantown, WV 26506-9123
Phone Numbers:

Office: (304) 293-1793
Email Address: olli@hsc.wvu.edu

<http://www.olliatwvu.org>