1

SARAH DIMICK

Seasonal Processions

In *The End of Nature* (1989), widely hailed as one of the first monographs confronting anthropogenic climate change, Bill McKibben asks: 'What does it mean that we have destroyed the old spring and replaced it with a new one of our own devising?'[1] What does it mean that climate change is altering a sense of reliable seasonal procession? Within literary and artistic scholarship, a seasonal procession is typically understood as a representation of each season's timely appearance and fulfilment over the course of a year, but McKibben is calling attention to an entirely different type of seasonal shift. Rather than tracking the procession of spring into summer, and summer into autumn, he signals the transition from 'old spring' into what might be thought of as anthropogenic spring. Similarly, he argues, 'summer is going extinct, replaced by something else that will be called "summer"'.[2] I suspect that McKibben's emphasis on threatened seasonality in *The End of Nature* derives partially from ecological fact and partially from literary tradition. 'The air around us, even where it is clear and smells like spring, and is filled with birds, is *different*, significantly changed', he notes.[3] In an ecological sense, of course, this statement references the imperceptible atmospheric shifts well underway by the 1980s, the steadily rising CO_2 levels altering the experience of spring in the northeastern region of the United States where McKibben resides. But literary context is just as important: McKibben's statement invokes Rachel Carson's *Silent Spring* (1962), gesturing towards the commingling of birdsong and environmental threat and disturbed seasonality that generates the power of Carson's title. Returning again and again to questions of seasonality as the world warms, McKibben claims his place in a tradition of seasonal literature, images of threatened seasonality accentuating his warning. Seasonality, long a feature of environmental non-fiction, enters the age of anthropogenic climate change.

To think through the resonances and complexities of seasonal literature and media in the time of anthropogenic climate change, I turn to two case studies in this chapter. First, to examine the experience of reading seasonal

https://doi.org/10.1017/9781009057868.002 Published online by Cambridge University Press

prose drafted before widespread awareness of anthropogenic climate change, I revisit Carson's oeuvre, paying particular attention to her ocean trilogy. I contextualise this trilogy within American seasonal writing of the mid twentieth century, take a brief foray into seasonality within the blue humanities, and then speculate on the marked tendency of environmental critics to return to Carson's work when confronting the climate crisis. What, I ask, drives these currents of nostalgia towards seasonal writing crafted prior to widespread awareness of anthropogenic climate change? I then pivot from this seasonal retrospective to consider the contemporary production of seasonal media, using the British Broadcasting Corporation (BBC) series *Springwatch* as a second case study. I locate *Springwatch* within a British tradition of seasonal media, reflect on how environmental and cultural seasonality intersect in this series, and then examine how *Springwatch* actively works to generate seasonal data for climate research in the United Kingdom. Analysing this show, I am curious about the possibilities of seasonal media unfolding within – and responding to – perceptible season creep. Placed beside each other, Carson's writing and *Springwatch* allow for a comparison of seasonal literature and media produced before and after what Lynn Keller calls the 'self-conscious Anthropocene', the 'pervasive cultural awareness of anthropogenic planetary transformation' that emerges at the turn of the twenty-first century.[4] These two cases offer a glimpse of how seasonal representations are also undergoing a form of season creep, the meanings and capacities of seasonal literature and media adjusting in response to rising awareness of anthropogenic seasonality.

Rachel Carson: Seasonal Retrospectives in the Age of Anthropogenic Climate Change

Prior to the publication of *Silent Spring*, Carson was known as an oceanic writer, but she was also an established seasonal writer.[5] Carson was unusually well versed in seasonal literature – copies of Henry David Thoreau's *Journal* and Richard Jeffries's nature essays had a permanent place on her bedside table.[6] And yet, Carson's proclivity for seasonal prose is unsurprising – perhaps even a bit conventional – within the genre of mid-twentieth-century American nature writing. As the cultural historian Michael Kammen notes, Carson was part of a cohort of seasonal writers working between the 1940s and 1970s, including Aldo Leopold, Joseph Wood Krutch, Donald Culross Peattie, Edwin Way Teale, Gladys Taber, and Hal Borland.[7] Carson employs seasonality more subtly in her oeuvre than many members of this cohort – Teale, for instance, would publish a seasonal quartet, one book dedicated to each of the four seasons of the American temperate zone. Nonetheless, Carson's first book,

Under the Sea-Wind: A Naturalist's Picture of Ocean Life (1941), exhibits a clear if understated seasonal cycle, its chapters subtly processing through the year: 'Spring Flight' is followed by 'Summer's End', 'Indian Summer of the Sea', and 'Winter Haven'. As Kammen suggests, Henry Beston's *The Outermost House: A Year of Life on the Great Beach of Cape Cod* (1928) may be the model for Carson's seasonal procession: Carson was an avid reader of Beston's work, and even visited the Massachusetts site depicted in *The Outermost House* while she drafted *Under the Sea-Wind*.[8] Identifying Beston as one of Carson's key influences usefully positions her within a distinct genealogy of oceanic seasonal prose.

Before turning to the particularities of oceanic seasonal writing, it is worth observing that Carson's clearest affinity with other seasonal writers of the mid-twentieth century is her sentimental treatment of the seasons, her tendency to describe annual recurrences as emotionally reassuring or sustaining. For instance, in her 1956 essay, 'Help Your Child to Wonder', published in the magazine *Woman's Home Companion*, Carson reflected on the certainties of seasonal repetition: 'There is symbolic as well as actual beauty in the migration of birds; in the ebb and flow of the tides; in the folded bud ready for the spring. There is something infinitely healing in these repeated refrains of nature – the assurance that dawn comes after night, and spring after winter.'[9] The publication context – an essay on observational practices to cultivate in children – suggests a link between Carson's seasonal philosophy and her childhood upbringing within the nature study movement of the early twentieth century. Nature study enthusiasts like Carson's mother, Maria, sought to instil 'a sympathetic attitude towards nature' in their young pupils through regular observations of the natural world.[10] The heavy sentimentality of Carson's seasonal work – her conviction that seasonal processions are representative of assurance and order – may be an offshoot of nature study's core tenets. Indeed, Carson insisted: 'I am not afraid of being thought a sentimentalist ... I believe natural beauty has a necessary place in the spiritual development of any individual or any society.'[11] Carson, like other nature writers of this period, did not shy away from heavy-handed seasonal sentimentalism: annual processions were not simply ecological occurrences but rather symbols of steadiness and assurance.

While the emotional tenor of Carson's seasonal prose aligns with other seasonal writing of this period, her work differs from the dominant tradition insofar as it focuses on the sea. Studies of American seasonal literature are so often populated with terrestrial works – highlighting Edwin Way Teale's automobile trip across the United States in pursuit of seasonal change or Annie Dillard's hyperlocal observations in a valley of Virginia's Blue Ridge

Mountains – and part of the reward of returning to Carson's sea trilogy is the crucial reminder that some of the most powerful works of seasonal prose fall within the purview of the blue humanities.[12] In *The Sea around Us* (1951), the second work in Carson's sea trilogy, she cautions against assuming that 'the passage of the seasons, the procession of the years, are lost in [the ocean's] vastness, obliterated in its own changeless eternity', and indeed, tracking oceanic seasonality requires an alternate set of gauges.[13] Carson's eye, for instance, is drawn to the processions of light that play across the ocean's surfaces. She notes that the summer sea is marked by 'a hard, brilliant, coruscating phosphorescence' caused by protozoa or by bioluminescent shrimp glittering like 'a thousand thousand moving pinpricks of light, like an immense swarm of fireflies moving through a dark wood'.[14] These summer light shows are reprised in autumn, 'when every wave crest is aflame' with the flowering of the dinoflagellates.[15] In addition to tracking processions of luminescence, Carson also notes regular surfacings and submergences, charting seasonality along a vertical axis: 'glassy globules' of cod eggs slowly rise in the spring, while minuscule crustacea descend for winter hibernation.[16] In Carson's estimation, the careful observer of these seasonal movements is rewarded with a sense of oceanic seasonality: 'seen with an understanding eye', she insists, 'the signs are there'.[17]

As Carson works to attune her readers to oceanic seasonal processions, she inevitably emphasises topics now bound to anthropogenic climate change. For instance, even in the short booklets she produced during her employment with the US Fish and Wildlife Service, Carson's depictions of oceanic seasonality emphasise movements and migrations. In 'Chincoteague: A National Wildlife Refuge', the booklet that Carson researched and drafted in 1946, simultaneously with her ongoing research for *The Sea around Us*, she depicts the seasonal patterns of bird migrations along the Atlantic flyway, particularly as they manifest on a wildlife refuge located on a barrier island just off the coast of Virginia.[18] 'The changing seasons at Chincoteague are reflected in the changing populations of the birds', Carson explains.[19] Beginning in May and proceeding until June, she offers prospective visitors a migratory almanac:

> September brings the first of the returning waterfowl, and toward the end of the month flocks of small land bird migrants appear. One morning tree swallows by the thousand are lined up, wing to wing, on the Coast Guard telephone wires for miles along the beach … Then in October, when the marshes are silvered with frost in the mornings, the waterfowl begin to pour in from the north. … the refuge suddenly takes on new life as flocks of canvasbacks, redheads, teal, and baldpates rise into the air in noisy thousands.[20]

https://doi.org/10.1017/9781009057868.002 Published online by Cambridge University Press

Beyond her characteristically fluid prose, two elements of Carson's migratory almanac are worth noting. First, the seasonality depicted in this booklet is a seasonality of the shoreline, a depiction of arrivals and departures in both the marshes and the waters just offshore. Second, for Carson, avian migratory patterns have something of the oceanic about them, the birds' movements recalling the advance and return of the salt water: 'the activities of the refuge have reached their lowest point by mid-summer', she notes, 'the ebb between the flood tides of migration'.[21] To conceptualise seasonality as tidal is to indelibly link seasonal writing as a genre with the ocean itself.[22]

But most crucially, Carson's oceanic seasonal writing resists the tendency towards small-scale, stationary observation that defines much of terrestrial seasonal writing, opting instead for a planetary conceptualisation of seasonality.[23] Carson tracks hemispheric migrations and global currents, working to articulate – for a general audience – the way that these vast earth systems function and interact. In *The Sea around Us,* she observes that 'a very slight winter warming of the eastern Atlantic temperatures means, for example, that the snow cover of northwestern Europe will melt earlier, that there will be an earlier thawing of the ground, that spring plowing may begin earlier, that the harvest will be better'.[24] As Carson's prose forges connections between warming ocean currents, precipitation patterns, and agricultural yields, it seems to anticipate the concerns of current climate models. And yet, as Hester Blum notes, even as Carson's description of the ocean as a 'global thermostat' foreshadows current climate discourse, her emphasis on the equilibrium of these planetary systems is a reminder that her research and writing predate widespread awareness of anthropogenic climate change.[25] In Carson's sea trilogy, the ocean is 'the great regulator, the great stabilizer of temperatures', and its currents exhibit 'a beautifully balanced system – as long as it remains in balance'.[26] The global scale of seasonal patterns generated by the ocean – the expansiveness of these annual circuits and patterns – is, for Carson, an assurance against their alteration.

I would argue, however, that with the publication of *Silent Spring* in 1962, Carson inverts the literary seasonality of mid-twentieth-century American nature writing, anticipating seasonal writing informed by anthropogenic climate change insofar as she utilises disrupted seasonality to signal environmental threat. The pastoral ideal of Carson's famous opening fable is generated through a subtle seasonal procession:

> in spring, white clouds of bloom drifted above the green fields. In autumn, oak and maple and birch set up a blaze of color that flamed and flickered across a backdrop of pines . . . . Even in winter the roadsides were places of beauty,

https://doi.org/10.1017/9781009057868.002 Published online by Cambridge University Press

> where countless birds came to feed on the berries and on the seed heads of the dried weeds rising above the snow.[27]

After lulling her readers with the reassurance of this procession, Carson represents chemical threat by undercutting spring's arrival: 'It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens, and scores of other bird voices there was now no sound.'[28] Bees are absent from blooming orchards and the window for pollination closes. Newborn piglets die in a matter of days. Carson effectively reverses the sentimentality of seasonal nature writing, offering readers a poisoned, hollow rendition of a season. Drawing on seasonal tropes of spring as a time of vitality and rebirth, she crafts a season of unease. To be clear, Carson is not depicting altered phenologies: her fable is less concerned with seasonal timing than with seasonal absences. And yet, as she narrates a spring that fails to fully manifest, Carson's image of threatened seasonality is a clear precedent for the kind of anthropogenic seasonality found in McKibben's work and other climate writing produced at the turn of the twenty-first century.

It is tempting, as Rob Nixon suggests, to read Carson's writing 'anachronistically', searching for signs of a shifting climate in texts written decades before widespread concern about global warming.[29] And indeed, as Blum notes, reading works like *The Sea around Us* in the twenty-first century, 'when both ecocritical scholarship and environmental policy are increasingly turning to more oceanic and planetary modes of thinking, compels responses both startling and familiar'.[30] But even as Carson's research balances on the precipice of contemporary concerns, I suspect this desire to return to Carson's work as the climate crisis intensifies, this yearning for an ahistorical reading that allows her to speak to current anxieties, is only partially due to her subject matter. As Jenny Price notes, Carson 'was a visionary', someone who not only shaped the modern environmental movement but 'has remained its conscience'.[31] Facing the uncertainties of the climate crisis, I often find myself wishing for Carson's insight, but the closest possibility is a rough historical analogy. In 1951, shortly after the publication of *The Sea around Us*, Carson explained that she received 'a great deal of mail . . . people everywhere are desperately eager for whatever will lift them out of themselves and allow them to believe in the future'.[32] She attributed this outpouring of correspondence to the anxieties of living under nuclear threat, to readers 'finding in [*The Sea around Us*] something that is helping them face the problems of these difficult times'.[33] Falling back on the sentimentalism that characterised so much of her seasonal prose, Carson hypothesised that, in periods of duress, 'release from tension can come through the

contemplation of the beauties and mysterious rhythms of the natural world'.[34] For Carson, the observation of seasonal processions was a method of retaining equanimity in the face of drastic environmental uncertainty. But for readers returning to Carson's oeuvre in the face of anthropogenic climate change, that reassurance becomes difficult to access: these patterns of seasonality are now subjects of uncertainty in their own right.

Springwatch: Seasonal Media Unfolding in the Age of Anthropogenic Climate Change

Pivoting from this retrospective on Carson's seasonal writing, I turn now to seasonal media produced with a full awareness of anthropogenic climate change. My focus is on *Springwatch*, a television series produced annually by the BBC that regularly garners close to 4 million viewers.[35] The first season of *Springwatch* aired in 2005, followed in subsequent years by the spin-off programmes *Autumnwatch* and *Winterwatch*. Beginning on the Spring Bank Holiday, which typically falls on the last Monday in May, *Springwatch* is broadcast four evenings a week for three weeks. The show offers viewers a cheerful collage of footage from live webcams – which capture Glasgow's urban foxes, the annual cuckoo migration, swallows nesting in a barn on an organic farm in Devon, and muntjacs at Birmingham Airport. At its inception, *Springwatch* seemed like programming designed to convey sentimental reassurance, its seasonal footage of cute animals emphasising feel-good nature: like portions of Carson's writing, *Springwatch* aimed to generate a sense of environmental wonder. However, *Springwatch* coincided with perceptible season creep in Britain. As global temperatures spiked, altering blooming times and migratory arrivals, the very events that *Springwatch* set out to document became destabilised. It became impossible for the BBC to produce a seasonal nature documentary without also producing a climate change documentary: the two genres inevitably converged.

Springwatch emerged from an array of British natural history programming. In the late 1970s, live webcams focused on a badger den in the Cotswolds provided night-time footage for a show called *Badgerwatch*, while a series called *Birdwatch* highlighted the vast range of bird species residing in Britain.[36] These progenitors were produced by the BBC's Natural History Unit, also responsible for the more widely recognised *Planet Earth*, as well as *Springwatch* itself. While these earlier series acclimated British audiences to curated live footage, *Springwatch* and its seasonal spin-offs were distinct in that their focus was not just spatial but also temporal: they featured ecological processions, they documented a season unfolding.

Additionally, in contrast to *Planet Earth* and other BBC nature programming that tracked exotic species in far-off locales, *Springwatch* stayed close to home, skirting the colonialist tendencies that often mark travelogue-expedition nature documentaries.[37] Instead, *Springwatch* relishes the particularities of British seasonality. Rather than reverting to hyperlocal observations or trying to encompass the global seasonal patterns of Carson's work, *Springwatch* is invested in cultivating a sense of seasonality on the level of the nation. The series ultimately constructs, commercialises, and nationalises a period of environmental time.

Just as it emerged from prior renditions of televised nature, *Springwatch* emerged from a long British tradition of cultural seasonality. Other scholars, notably Tess Somervell, have undertaken the task of contextualising British seasonal writing within a more extensive history of European cultural production, ranging from Ovid's description of an everlasting spring to Vivaldi's *Four Seasons* concerti.[38] Indeed, as Somervell's work attests, seasonality suffuses British writing: the pilgrimage in *The Canterbury Tales* commences 'whan that Aprill with his shoures soote / the droghte of March hath perced to the roote', the influence of James Thomson's eighteenth-century poem cycle *The Seasons* can be traced through nineteenth-century works like John Keats's 'To Autumn', and on to Scottish writer Ali Smith's *Summer*, the fourth novel in her lauded seasonal quartet, published in 2020. In relation to this vast corpus, *Springwatch* continues a particular vein of British seasonal pastoralism: it emphasises appreciation for seasonal processions, participating in what Raymond Williams calls 'a renewed intensity of attention to natural beauty' undertaken not by labourers but rather by 'the scientist or the tourist'.[39] The series generates and promotes a carefree enjoyment of the passage of the year, rendering the British seasons as visual pleasures rather than analysing their agricultural or economic implications. How, then, does this television series working within the genre of the seasonal pastoral incorporate anthropogenic climate change? How is it possible to revel in the first blooms of a particular flower, while also noting that blooming is occurring earlier and earlier? This tension lies at the core of *Springwatch* and can exacerbate what Williams calls the tendency to set 'an ordered and happier past . . . against the disturbance and disorder of the present'.[40] The act of watching, even with the aim of seasonal appreciation, reveals change.

A season is an environmental occurrence, a period of time in which particular environmental and climatic events are expected to unfold, but seasons can also signify cultural periods, a schedule of performances or airtimes, and *Springwatch* entangles these two definitions. The show, as British scholars Peter Coates and Susie Painter note, has 'become as much

a part of our spring as the bluebells, wild garlic, frogspawn, and nesting bluetits'.[41]

In one sense, spring's seasonal procession within the United Kingdom brings a cultural season into being, environmental events occasioning the BBC's documentary serial. And springtime, as an ecological procession unfolding over the course of weeks, is uniquely suited to seriality: each nightly instalment of *Springwatch* provides an update on spring's development. In a reciprocal sense, though, the cultural season of *Springwatch* draws attention to – and heightens awareness of – the environmental season the show seeks to engage. As it generates interest in seasonal observation among its audience, *Springwatch* cultivates alert viewers not only of a show but also of the season outdoors. The hosts ask viewers to report on their experiences of the season – what they are noticing in their backyards or what they have observed on their commutes to work. For instance, in the ninth season, which aired in 2013, Martin Hughes-Games, one of the three hosts, directly solicits engagement from viewers: 'But we would like to know how spring has been for you. Can you tell us what's your experience of spring? What have you seen? As ever, we'd love to hear from you.'[42] *Springwatch* the show adheres to a more fixed schedule than the environmental season it seeks to portray: it airs according to the calendar rather than according to phenological events. Therefore, the entanglement of these two kinds of seasonality – environmental and cultural – in combination with the way *Springwatch* repeats annually on a precise schedule, positions the show to highlight changes in spring's arrival in the United Kingdom. During the same three weeks each year, a substantial population of viewers becomes particularly attuned to environmental events, primed to note repetitions or discrepancies in timing from year to year.

These appeals for viewer responses set the stage for citizen science – the amassing of vast sets of data through the voluntary observations of amateur naturalists. Enthusiasm for *Springwatch* as a media phenomenon motivated thousands of Britons to record their own sightings of the arrivals and occurrences that became known as the '*Springwatch* six': sighting of frogspawn, the arrival of the peacock butterfly, the flowering of hawthorn, the sighting of swifts, the appearance of red-tailed bumblebees, and the arrival of seven spot ladybirds. The Woodland Trust, an environmental organisation that partnered with the BBC in the show's early seasons and coordinated these observations, notes that *Springwatch* enabled seasonal data collection on a mass scale. As the hosts urged viewers to send in their records, the Woodland Trust 'received literally tens of thousands of observations . . . to put this in perspective, in a standard year we receive around a *tenth* of this number of observations'.[43] According to *The Guardian*, in 2005, when

Springwatch and *Autumnwatch* actively promoted this citizen-science effort, more than 93,000 observations were submitted to the Woodland Trust's Nature's Calendar Survey. Moreover, there are now 40,000 people in the United Kingdom who have registered as recorders with the Woodland Trust.[44] In this way, a televised nature programme amplified seasonal observation across the United Kingdom, generating a data set far more extensive than what would have otherwise existed.

*

It's crucial to note, though, that *Springwatch* and the Woodland Trust not only amass seasonal data but also report on the degree to which the climate is changing. When contemporary data from the Nature's Calendar Survey is placed alongside records from the Royal Meteorological Society taken between 1875 and 1947, or when current observations are compared with records taken by the eighteenth-century naturalist Robert Marsham, phenologists can demonstrate that each time the global temperature rises by one degree Celsius, plants bloom five days earlier in Britain.[45] These comparative records indicate that climate change has dramatically shifted spring's arrival. *Springwatch* regularly airs these findings, completing the feedback loop between seasonal media and seasonal data: for instance, in 2010, an episode called 'Signs of Change' followed the host Chris Packham as he outlined historical phenological efforts in Britain and explained how they compare to present observations. In essence, *Springwatch* now bridges seasonal nature footage and the climate change documentary, commingling genres. The pastoral charm of spring's arrival may initially attract viewers who crave footage of blooming daffodils or downy hatchlings, but as these viewers contribute their own observations, they generate alarming climatic data that is then featured on future episodes. In *Springwatch*, as in much seasonal media produced in an age increasingly conscious of the climate crisis, spring is simultaneously pastoral and catastrophic.

Although the repercussions of anthropogenic climate change permeate literature and media, they are particularly acute in seasonal works. To consider literary and cultural seasonality in the early decades of the twenty-first century, as season creep becomes a tangible experience, is to watch a literary and cultural mode shift in response to alterations in the physical world. Reflecting on earlier renditions of seasonality – like those exemplified in Carson's work – often generates a degree of nostalgia, made all the more intense by seasonal literature's association with affects of reassurance. Meanwhile, contemporary seasonal media productions – like *Springwatch* – that actively document and track changes in seasonal timing

often mix a sense of unease or apprehension into the easy aesthetics of appreciation that have traditionally characterised the seasonal mode. In this sense, it becomes possible to think of season creep – environmental timings shifting earlier or later as the climate changes, bloomings, and migratory arrivals creeping into timespans they have previously not occupied – not only in an ecological sense, but also as a literary and cultural phenomenon. The seasonal mode itself is creeping into new territory and affects. If tracking season creep in the physical world involves comparing the timing of past and present seasonal events, noting how the dates of leaf burst and frogspawn have shifted, then tracking literary or cultural season creep involves comparing past and present seasonal works. Reflecting on past seasonal writing in light of current seasonal productions allows us to trace the ways that seasonality has shifted culturally: a mode of reassurance is becoming a mode of keen observation and heightened anxiety.

Notes

1 B. McKibben, *The End of Nature* (New York: Random House, 1989), 79.
2 McKibben, *End of Nature*, 59.
3 McKibben, *End of Nature*, 18.
4 L. Keller, *Recomposing Ecopoetics: North American Poetry of the Self-Conscious Anthropocene* (Charlottesville: University of Virginia Press, 2017), 8–9.
5 Notable studies of Carson's engagement with seasonality include M. Kammen, *A Time to Every Purpose: The Four Seasons in American Culture* (Chapel Hill: University of North Carolina Press, 2004) and S. Kaza, 'Rachel Carson's Sense of Time: Experiencing Maine', *ISLE: Interdisciplinary Studies in Literature and the Environment* 17.2 (2010), 291–315.
6 W. Souder, *On a Farther Shore: The Life and Legacy of Rachel Carson* (New York: Crown, 2012), 155–6.
7 Kammen, *A Time to Every Purpose*, 176–86.
8 Kammen, *A Time to Every Purpose*, 146.
9 R. Carson, 'Help Your Child to Wonder', *Woman's Home Companion* (July 1956), 48. This passage also appears in a 1954 speech Carson gave to Theta Sigma Phi, a sorority of women journalists; see L. Lear, *The Lost Woods: The Discovered Writing of Rachel Carson* (Boston, MA: Beacon Press, 1998), 163.
10 The phrase is Cornell University horticulturalist Liberty Hyde Bailey's. It appears in K. C. Armitage, *The Nature Study Movement: The Forgotten Popularizer of America's Conservation Ethic* (Lawrence: University of Kansas Press, 2009), 1. For more on Carson's connection to the nature study movement, see Armitage, 209–11.
11 Lear, *Lost Woods*, 160.
12 See E. W. Teale's *North with the Spring* (New York: Dodd, Mead & Company, 1951), *Autumn across America* (New York: Dodd, Mead & Company, 1956), *Journey into Summer* (New York: Dodd, Mead & Company, 1960), and

Wandering through Winter (New York: Dodd, Mead & Company, 1965). Also see A. Dillard's *A Pilgrim at Tinker Creek* (New York: Harper & Row, 1974).

13 Carson, *The Sea around Us* (New York: Oxford University Press, 1951), 28.
14 Carson, *Sea around Us*, 32.
15 Carson, *Sea around Us*, 33.
16 Carson, *Sea around Us*, 36.
17 Carson, *Sea around Us*, 29.
18 For a biographical account of this period of intense research and travel, see L. Lear, *Rachel Carson: Witness for Nature* (New York: Henry Holt, 1997), 131–51.
19 Carson, 'Chincoteague: A National Wildlife Refuge', *Conservation in Action* (Washington, DC: Fish and Wildlife Service, Department of the Interior, 1947), 12.
20 Carson, 'Chincoteague', 12.
21 Carson, 'Chincoteague', 13.
22 As Kammen notes, descriptions of seasonality as akin to tides can be found in the writing of Henry David Thoreau, John Burroughs, and May Sarton; *A Time to Every Purpose*, 153. Carson, however, was one of the few writers to think of oceanic patterns not simply as metaphor but as intertwined with the experience of seasonality itself.
23 Examples of terrestrial localism include Leopold and Dillard. For more on Carson's planetary perspective in comparison with her contemporaries, see Kammen, *A Time to Every Purpose*, 181.
24 Kammen, *A Time to Every Purpose*, 171–2.
25 H. Blum, '"Bitter with the Salt of Continents": Rachel Carson and Oceanic Returns', *WSQ: Women's Studies Quarterly* 45.1–2 (2017).
26 Kammen, *A Time to Every Purpose*, 172, 175.
27 R. Carson, *Silent Spring* (Boston, MA: Houghton Mifflin, 1962), 1–2.
28 Carson, *Silent Spring*, 2.
29 R. Nixon, 'Rachel Carson's Prescience', *The Chronicle of Higher Education* (3 September 2012).
30 Blum, 'Bitter with the Salt', 287.
31 J. Price, 'Stop Saving the Planet! – and Other Tips via Rachel Carson for Twenty-First-Century Environmentalists', in L. Culver *et al.* (eds.), *Rachel Carson's* Silent Spring: *Encounters and Legacies*, special issue of *RCC Perspectives*, 7 (2012), 11.
32 Lear, *Lost Woods*, 88–9.
33 Lear, *Lost Woods*, 88.
34 Lear, *Lost Woods*, 89.
35 B. Dowell, 'TV Ratings: Springwatch Return Watched by 3.9m', *The Guardian* (26 May 2009).
36 P. Lee-Wright, *The Documentary Handbook* (London: Routledge, 2010), 359.
37 For an excellent discussion of the rise of travelogue-expedition wildlife films in American cinema, see G. Mitman, *Reel Nature: America's Romance with Wildlife on Film* (Seattle: Washington University Press, 1999).
38 T. Somervell, 'The Seasons', in A. Johns-Putra (ed.), *Climate and Literature* (Cambridge University Press, 2019), 45–59.
39 R. Williams. *The Country and the City* (New York: Oxford University Press, 1973), 20.

40 Williams, *Country and City*, 45.
41 P. Coates and S. Painter, 'How *Springwatch* Was Sprung', *Arts and Humanities Research Council Blog* (14 June 2018).
42 *Springwatch*, season 9, episode 1, 2013.
43 K. Lewthwaite, 'Ten Years of Nature's Calendar', *Springwatch, Autumnwatch and Winterwatch Blog* (4 June 2014), www.bbc.co.uk/blogs/natureuk/entries/17cc4d9a-de72-3d55-ba48-9c014b9b96ca.
44 'Britain Blooming Earlier Thanks to Rising Temperatures, Study Says', *The Guardian* (7 April 2010).
45 'Britain Blooming Earlier'.

https://doi.org/10.1017/9781009057868.002 Published online by Cambridge University Press