## Ecocritical Heywood and The Play of the WeatherJENNIFER L. AILLESEarly Theatre 16.2 (2013), 185–196DOI: http://dx.doi.org/10.12745/et.16.2.11

John Heywood's interlude The Play of the Wether: A New and Very Mery Enterlude of All Maner Wethers (1533) focuses specifically on the relationship between humans and the weather as negotiated through the divine. Curiously, most studies have not considered the importance of the weather in this play. Reading this interlude as primarily about weather not only demonstrates that early Tudor plays can be considered from an ecocritial perspective but also that so-called 'green studies' need to take into account pre-Shakespearean drama.

> 'The environment was born at exactly the moment when it became a problem'.<sup>1</sup>

Our foresayd father Saturne, and Phebus, Eolus and Phebe, these four by name, Whose natures not onely so farre contraryous, But also of malyce eche other to defame, Have longe tyme abused ryght farre out of frame The dew course of all theyr constellacyons, To the great damage of all Yerthly nacyons. (29–35)<sup>2</sup>

John Heywood's interlude *The Play of the Wether: A New and Very Mery Enterlude of All Maner Wethers* (1533) focuses specifically on the relationship between humans and the weather as negotiated through the divine. In the play, three gods and a goddess personify the weather: Saturn rules frost and snow, Phebus controls the sunlight, Eolus moves the winds, and the goddess Phebe brings the rains. These four have been fighting and, as a result of their personal disagreements, they have brought 'great damage [to] all Yerthly nacyons' (35) in the form of extreme weather and natural disasters. To 'redres' (25) the environmental destruction and bring comfort to the people of Earth, Jupiter, along with his 'parlyament' (22), halts these quarrels, and brings the weather to a temporary standstill. In an attempt to give agency to the people over their environment, Jupiter employs a vice character

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named Mery Reporte to survey a wide range of society to find out what kind of weather each person wants. These morality-like characters, who stand in for the larger 'comyn weale' (527), discuss the material effects that changes in the weather have on their leisure and livelihood in an attempt to convince Jupiter which types of weather should be allowed to occur.

Examining the weather in a dramatic text is part of an ecocritical mode what was labeled 'green studies' as recently as 2007. In essence, ecocriticism is the examination of nature, and the 'natural', what is often considered 'green' and at odds with humans and the world of artifice. This approach constitutes a 'political mode of analysis' in Greg Garrard's words, which involves the 'synthesis of environmental and social concerns'<sup>3</sup> to analyze the broad material conditions of texts. Ecocritics (re)examine concepts such as the 'pastoral', 'wilderness', 'nature', and the 'sublime' and the 'beautiful'.<sup>4</sup> They draw from paleoecological and anthropogenic research to show how literature responds to and reflects real world incidents of deforestation, disease epidemics, and the transplantation and migration of plant and animal species following trade and exploration routes. Following the original call of Rachel Carson's 1962 Silent Spring,<sup>5</sup> they raise awareness about environmental concerns and human responsibility in relation to pollution, globalization, and other man-made interventions into the natural world. Some of the most recent ecocritical work has focussed on object-oriented ontology (OOO) and the decentring of the human/nature binary at the heart of most ecocritical analysis. Instead of an anthropocentric model, under OOO, humans cannot be separated from their environment, whether that is 'nature' (the green environment) or the urban landscape (the place where many humans now spend their entire lives). For ecological disaster to be averted, objects, such as planets, rocks, or concrete, must be considered on their own terms in relation to each other with humans just a part of the relational mix.<sup>6</sup>

Ecocriticism has been a productive and growing trend in recent early modern scholarship, especially in the past five to six years since the problem of climate change and the ecological crisis have been at the forefront of cultural and media discourse.<sup>7</sup> Ecocritics focusing on early modern drama look at numerous subjects in addition to those above: they investigate the transformation of theatrical space into a new environment that stands in for forests and cities, they develop readings of pathetic fallacy and anthropomorphism by examining the rhetoric of plants and animals in dramatic monologues, or they demonstrate how storms are presented metaphorically, physically, and acoustically in stage practice.<sup>8</sup> Analysis of Shakespeare's plays dominates ecocritical studies of later Tudor drama,<sup>9</sup> but there is a lacuna in research on earlier Tudor drama.

The fate of the environment and society, namely, the relationship between the non-human and the human, is clearly linked by Heywood in *The Play of the Wether.* This relationship is central to the ecological crisis experienced in the play by the characters and the subsequent need to control the weather by Jupiter. From an ecocritical perspective, I argue that the play has important implications for the on-going discussion of ecological crisis and human response to this threat. But that is not how the play has normally been examined. In fact, the ecological aspects of the weather have largely been ignored in critical readings of the play.

David Bevington addresses the question of the significance of the weather, at least at the titular level, in his 1964 article 'Is John Heywood's Play of the Weather Really about the Weather?' Instead of analyzing the weather itself as represented in the play, Bevington builds on Kenneth Walter Cameron's earlier 1941 study to argue that weather is a 'trivial subject'<sup>10</sup> that is used to establish the primary allegory of the court of King Henry VIII. Cameron does include a brief section on 'Weather Conditions'<sup>11</sup> in his study, but his main interest in this subject concerns how it helps to date the composition of the play. Greg Walker in his 'Introduction' to the Blackwell edition of the play from 2000 also disregards the meteorological aspect by calling it 'the most inconsequential (and intractable) of subjects, the British weather',<sup>12</sup> while Candace Lines argues that '[t]he play's weather plot, far from being trivial, serves as a metaphor for social, political, and religious interdependence and the necessity of balance'.<sup>13</sup> These and other scholars, including Richard Axton and Peter Happé,<sup>14</sup> demonstrate how the play's 'literature of counsel'15 addresses the cultural anxieties surrounding the dissolution of Henry's marriage, the 'Acts of Succession' (1533, 1534, 1536), and the soon to be formalized 'Act of Supremacy' (1534), which made Henry a virtual god, like Jupiter, as the supreme head of the Church of England. The characters' debates are seen as a direct representation of the conflict between the court, the church, and the commoners. Peter Happé goes so far as to propose that the "Weather" actually suggests religion<sup>16</sup> since the people must go through a papist intermediary to communicate with and understand the divine. The play's call to have Jupiter placate the masses and decide on the best weather for all is argued to be a direct call for the monarch to begin what Walker calls 'the pacification and harmonization of the commonweal'.<sup>17</sup>

The 2009 *Staging the Henrician Court* project demonstrates that critics still ignore the weather as a topic of interest. In 2009 this project, a year and a half long interdisciplinary celebration of the quincentennial of the succession of the Tudor king Henry VIII, staged Heywood's *The Play of the Wether* in the Great Hall at Hampton Court Palace. Gregory Thompson from the Royal Shakespeare Company directed the interlude, and the overall project was led by Thomas Betteridge and Greg Walker, with assistance from Kent Rawlinson, Eleanor Rycroft and Dan Goren. In addition to the primary performance run, this project involved two workshops of the play, several academic conferences, a number of new and revised publications by leading Heywood scholars, and a website to catalogue the performance and related research.<sup>18</sup> Among the various sections on 'key research topics' and links to historical primary texts listed on the website, there is one striking absence: there is nothing at all about the weather. This absence is remarkable since Heywood's play is all about the weather.

While the reading of Jupiter's control of the weather as an allegory of Henry's court exemplifies an important mode of analysis, it seems equally important to look at the specific concerns about the weather and the requests put forth by each of the characters. The four gods of the weather do not engage in any dialogue, but they appear through Jupiter's opening discourse and the staged philosophical debates presented by the characters who respond to Mery Reporte's 'proclamacyon' (164). These eight individual characters embody all levels of society except the church, which is noticeably absent from the play, and include a Gentylman and a Gentylwoman, a Marchaunt and a Ranger, Water and Wynde Myllers, a Launder, and a Boy.

The Gentylman, on behalf of 'all come of noble and auncyent stock' (263), desires 'wether pleasaunt: / Drye and not mysty, the wynde calme and styll' (273–4) so that it will be easier to hunt deer. The Marchaunt, as part of a growing economic class that is extremely valuable in managing the local exchange of goods and their import and export internationally, wants neither

Stormy nor mysty, the wynde mesurable, That savely we may passe from place to place Berynge our seylys for spede most vayleable. (366–8)

His ships can be destroyed or left floundering by extreme weather and his request gets at the heart of his role as the linchpin in the economic chain when he argues: What were the surplysage of eche commodyte Whyche groweth and encreaseth in every lande, Excepte exchaunge by suche men as we be By wey of entercours that lyeth on our hande? We fraught from home thynges wherof there is plente, And home we brynge such thynges as there be scant. Who sholde afore us marchauntes accompted be? For were not we, the worlde shuld wyshe and want In many thynges. (353–61)

The Ranger, in turn, speaks on behalf of the keepers of wild game and wood. He requests a 'good rage of blustryng and blowynge' (425) wind to knock down trees since 'wyndefale' (420) supplements his meager income. Rangers were allowed to sell wood, but they were forbidden from cutting trees down. The need for wood is so strong that the Ranger exclaims that

yf [he] can not get god to do some good, [He] wolde hyer the Devyll to runne throrow the wood The rootes to turne up, the toppys to brynge under. A myschyefe upon them, and a wylde thunder! (426–9)

The Ranger's willingness to turn to the devil to bring the weather he wants, though presented comically in the play, underscores the frustration and lack of agency in his position. These lines also speak to the growing deforestation in England, due to shipbuilding and overcutting. The problem was severe enough that Parliament passed the 'Timber Preservation Act' in 1543, only ten years after Heywood wrote the play. Paleoecological and anthropogenic research give more specific information about how severe the deforestation was in England. Around 1000 CE, before William the Conqueror invaded, forest covered 39.6% of useable land in England and Wales<sup>19</sup>; by 1400 this level had been reduced drastically to 17.1%,<sup>20</sup> leading to increased dependence on coal and mills for alternative sources of energy.<sup>21</sup>

The two millers engage in the most extended debate in the play over which is the best means of weather to provide the energy to perform their trades, along with which is the best type of mill. Within this debate they weigh the benefits and costs of the wind and the rain. The Water Myller desires 'plente of rayne' (468), while the Wynde Myller hopes 'That in this world were no drope of water / Nor never rayne, but wynde contynuall' (543–4) to run their respective mills. The subject of millers and their mills was a contentious one. As large mills were introduced and fens were drained, common people needed to take their grain to particular mills to be processed. These individuals usually saw millers as unscrupulous and greedy, even if they were just collecting fees for the lord of the manor. The problem was so acute that, according to Carolyn Merchant, there were prohibitions against domestic milling and raids to destroy any handmills used by peasants trying to avoid the larger mills.<sup>22</sup>

The two female characters require opposing weather, which reflects their economic classes and use-value to the community. The young Gentylewoman's value as an item of cultural exchange depends on her looks and keeping 'fayre' (821), so she wants Jupiter 'To sende us wether close and temperate, / No sonne shyne, no frost, nor no wynde to blow' (830–1) — that way she can avoid being 'burne[d]' (822) by the 'sonne in somer ... / [and] In wynter [having] the wynde on every syde' (822–3). Though she is concerned with maintaining her chromatic purity, her desire to avoid the sun anticipates the current medical discourse to protect skin from damage and potential skin cancer by limiting UV/sun exposure. In contrast, the older Launder woman needs 'the sonne shyne that our clothes may dry' (894) in order to fulfill her domestic duties.

The final weather request comes from the Boy, 'the lest that can play' ('dramatis personae'), who wants snow for the 'makynge of snow ballys and throwyng the same' (1010) — a form of entertainment that may reflect the colder climate in early modern England. Between approximately 1300 and 1850 Europe experienced a period of cooling known as 'The Little Ice Age', which brought waves of colder weather, including snow and storms, to the entire region. Just before Heywood wrote *The Play of the Wether* there was a notable period of colder weather in England. According to the records of the wine harvest, there were 'three cold years with late harvest in 1527–29'<sup>23</sup> — any of which might have left enough snow on the ground for the 'makynge of snow ballys'.<sup>24</sup>

Furthermore, the Little Ice Age also enabled the spread of the plague and led to famines. Six of the eight respondents' requests explicitly involve an aspect of food production, distribution, or consumption that is at risk due to the extreme weather created by the unruly gods. Though done in sport, the Gentylman provides venison to his estate, and the Ranger is 'chargyd wyth all maner [of] game' (414). The two Myllers process grain and corn, and the Marchaunt distributes it to all the rest, including to the Gentlewoman, who, with the right weather, spends her day divided equally between 'apparellynge' (838), 'eatynge and drynkynge' (839), and 'walkynge / Or ... talkynge' (839–40). The Wynde and Water Myller's debate touches on how the weather affects all aspects of agricultural production. They both state that they are thinking of their fellow citizens since everyone needs their products. The Wynde Myller notes that 'As faste as God made corne, we myllers made meale / ... for comyn weale' (526–7). They also talk about how the weather influences the growth of crops: too much sun and wind can lead to drought, yet also posit 'How rayne hath pryced corne within this seven yere' (635), which corresponds with the start of the cold weather and late harvests in 1527.

After Mery Reporte sums up the group's requests twice, the Gentylman is allowed to address Jupiter on behalf of the rest — though he speaks from a position of inherited privilege, in contrast to Jupiter and the parliamentary gods and goddesses, he still must plead his case just like the rest. Jupiter's solution to satisfying everyone's desires is to show them, through logic and reasoning, that they must live with the patterns of the weather to make the most of nature. Jupiter proclaims:

Eche of you sewd to have contynuall Suche wether as his crafte onley doth requyre. All wethers in all places yf men all tymes myght hyer, Who could lyve by other? ... There is no one craft can preserve man so, But by other craftes, of necessyte, He muste have myche parte of his commodyte. All to serve at ones, and one destroy a nother, Or ellys to serve one and destroy all the rest, Nother wyll we do the tone nor the tother. (1185–98)

Jupiter's 'conclusyon' (1182) shows that one type of weather cannot be abolished in favor of another because 'no one craft can preserve man so' (1193). No one trade or position can live and provide all that it needs to survive on its own. Everyone in society is dependent on 'other craftes, of necessyte' (1194). Any excess or extreme in the weather will result in 'destroy[ing] all the rest' (1197). Jupiter's solution is for the humans to work with nature to accomplish their goals instead of trying to dominate it and work against it. For example, the Wynde Myllers should locate their mills on 'hyllys' (1173) and the Water Myllers 'in the valey' (1172) where the 'rayne ... fall' (1172) — that way 'in one instant both kyndes of mylles may grynde' (1175). Ultimately, Jupiter seems to satisfy everyone's requests by providing individualized weather, but, as Mery Reporte points out, in the end what he leaves them with is 'the wether even as yt was' (1240).

In Ecology Without Nature, Timothy Morton challenges the binary between nature and humans. He argues that 'the very idea of 'nature' which so many hold dear will have to wither away in an 'ecological' state of human society'.<sup>25</sup> The only way forward, in terms of ecological justice, is to engage in what he calls 'dark ecology' to stop '[p]utting something called Nature on a pedestal and admiring it from afar.<sup>26</sup> In one sense, Heywood's play shows the people as separated from the weather and nature since their needs must be mediated through Jupiter, the only one in direct contact with the four gods on high that control the elements and seem to operate with 'malyce' (32). The play, however, also reveals the direct connection between the people and their environment. The meteorological phenomena directly impact the characters, their livelihoods, and their entertainments. In my epigraph, Morton argues that '[t]he environment was born at exactly the moment when it became a problem'.<sup>27</sup> Similarly, the weather becomes a problem for the characters when the extremes caused by the gods threaten their daily existence. Or, outside of the play, the weather becomes a topic for theatre at the moment it becomes a pressing danger to English society. According to Fagan, the 'spike of sudden cold weather in 1527 brought immediate threats of social unrest. In that year, the mayor's register at Norwich in eastern England noted "there was so great scarceness of corne that aboute Christmas the comons of the cytte were ready to rise upon the ryche men".<sup>28</sup> Morton goes further to argue that, 'Dark ecology undermines the naturalness of the stories we tell about how we are involved in nature. It preserves the dark, depressive quality of life in the shadow of ecological catastrophe'.<sup>29</sup> Though Merry Reporte makes 'merry' of each of the characters' complaints and requests, their very existence is at risk, and they know it. In between the bawdy banter and the sometimes trivial-sounding debates, Heywood's characters express a very real, and very depressing, anxiety about the world and how changes in the weather threaten each of their places in it.

Approaching John Heywood's *The Play of the Wether* from an ecocritical perspective is not to deny the Henrician allegory as an important aspect of the play, but rather to see that the play also engages in a recognizable protoecocritical discourse. More specifically, an ecocritical perspective allows us to get at the heart of the relation between private and public policy and the seemingly eternal desire for monarchs and governments to control the one thing that is beyond human powers, even the power of those who have divine grace: the weather. If Jupiter is an allegorical representation of King Henry VIII, then the play represents the anxieties surrounding the monarch's responsibilities to take care of his land and people in a time of unpredictable weather and climate change.

Heywood's play ultimately reveals a very 'dark' message about changes in the weather. While Heywood's characters thought Jupiter could actually satisfy their individual demands, his inability to control the weather reveals that no divine or messianic solution exists to remedy the environmental crisis — then or now. There will be no merry report of nature as long as society considers it separate from and in opposition to human and governmental actions.

Though I have only touched on some of the issues in this essay, re-examining Heywood's play from an ecocritical perspective opens up important new directions for future research in earlier Tudor drama. Ecocriticism allows for fresh literal and historical explorations of dramatic texts that move beyond political and allegorical readings while also enriching those considerations. Scholars have much work to do regarding historical weather patterns, natural disasters, and how the environment affects food production and processing, distribution of goods and services, and recreation across ages, genders, and estates. Noticing how earlier Tudor playwrights addressed and incorporated these and other environmental concerns in their works offers us a new way of thinking about how ecological issues arise later in the commercial theatre of London. Considering the importance of the current ecological crisis in the twenty-first century, and our own individual and collective responses to it, ecocriticism also challenges certain notions of isolated and exclusive periodization since much remains to be learned by focusing on how historical and allegorical texts respond to their own ecological events.

## Notes

I would like to thank Erin Kelly and Maura Giles Watson for organizing the 'New Directions in Earlier Tudor Drama' session at MLA in January 2012. I would also like to thank Eric Hengstebeck for his helpful comments in revising this essay.

1 Timothy Morton, *Ecology Without Nature: Rethinking Environmental Aesthetics* (Cambridge, 2009), 141.

- 2 John Heywood, *The Play of the Weather* (1533), Greg Walker (ed.), *Medieval Drama: An Anthology* (Oxford, 2000), 455–78. Unless otherwise noted, all references will be from this edition.
- 3 Greg Garrard, *Ecocriticism* 2nd ed. (London, 2012), 3-4.
- 4 See Garrard's *Ecocriticism*, now in its second edition, for a detailed examination of ecocritical perspectives related to 'pollution', 'the pastoral', 'wilderness', 'animals', 'apocalypse', and other aspects. For those interested in ecocriticism and pedagogy, see his new collection, Greg Garrard (ed.), *Teaching Ecocriticism and Green Cultural Studies* (New York, 2012).
- 5 Carson's study (*Silent Spring* 40th Anniversary Edition [New York, 2002]) on pesticides, especially DDT, and their negative effects on birds, animals, and humans, is considered the foundational text of the environmental movement.
- 6 Graham Harman is considered to have founded the 'object-oriented' movement with his 1999 dissertation, which was published as *Tool-Being: Heidegger and the Metaphysics of Objects* (Peru, 2002). Timothy Morton is the primary ecocritic who propounds OOO. See Morton's *Ecology Without Nature* (Cambridge, 2007), *The Ecological Thought* (Cambridge, 2010), and *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis, 2013).
- 7 Robert N. Watson, Back to Nature: The Green and the Real in the Late Renaissance (Philadelphia, 2006); Thomas Hallock, Ivo Kamps, and Karen L. Raber (eds), Early Modern Ecostudies: From the Florentine Codex to Shakespeare (New York, 2008); and Jennifer Munroe and Rebecca Laroche (eds), Ecofeminist Approaches to Early Modernity (New York, 2011) are a few of the studies that engage in ecocritical analyses of the early modern period. See also Patricia Yaeger, Laurie Shannon, Vin Nardizzi Ken Hiltner, Saree Makdisi, Michael Ziser, and Imre Szermen, 'Editor's Column: Literature in the Ages of Wood, Tallow, Coal, Whale Oil, Gasoline, Atomic Power, and Other Energy Sources', PMLA 126.2 (2011), 305–26, DOI: http://dx.doi .org/10.1632/pmla.2011.126.2.305.
- 8 The 2013 Shakespeare Association of America panel session 'New Directions in Shakespeare and Ecocriticism' (Toronto, 30 March 2013) exemplifies current early modern ecocriticism. Jennifer Munroe addressed the issue of prosopopoeia and speaking on behalf of nature and women in *Titus Andronicus*, Vin Nardizzi discussed ecomimesis and how actors 'revivify' the trees through their words and references to the architecture of the posts in wooden O theatres, and Karen Raber focused on kinesthetic systems and the prosthetic connection between animals and humans.
- 9 See Gabriel Egan, *Green Shakespeare: From Ecopolitics to Ecocriticism* (New York, 2006); Lynne Bruckner and Dan Brayton (eds), *Ecocritical Shakespeare* (Surrey,

2011); and Dan Brayton, *Shakespeare's Ocean: An Ecocritical Exploration* (Charlottesville, 2012), to name a few.

- 10 David M. Bevington, 'Is John Heywood's *Play of the Weather* Really about the Weather?' *Renaissance Drama* 7 (1964), 11.
- 11 Kenneth Walter Cameron, John Heywood's 'Play of the Wether': A Study in Early Tudor Drama (Raleigh, 1941), 40-3.
- 12 Greg Walker, Medieval Drama: An Anthology, 456.
- 13 Candace Lines, "'To Take on Them Judgemente": Absolutism and Debate in John Heywood's Plays', *Studies in Philology*, 97.4 (2000), 422.
- 14 See also Richard Axton and Peter Happé (eds), *The Plays of John Heywood* (Cambridge, 1991); Peter Happé, 'Dramatic Images of Kingship in Heywood and Bale', *Studies in English Literature, 1500–1900* 39.2 (1999), 239–53, DOI: http://dx.doi.org/10.1353/sel.1999.0015 on Jupiter as Henry VIII; and Candace Lines's "To Take on Them Judgemente". See also Lynn Forest-Hill, 'Lucian's Satire of Philosophers in Heywood's *Play of the Wether', Medieval English Theatre* 18 (1996), 142–60, for a slightly different focus on how Heywood adapts Lucian's dialogue *Icaromenippus* as the source of his satire.
- 15 Greg Walker, Writing Under Tyranny: English Literature and the Henrician Reformation (Oxford, 2005), 100.
- 16 Happé, 'Dramatic Images of Kingship in Heywood and Bale', 242.
- 17 Walker, Writing Under Tyranny, 100.
- 18 Thomas Betteridge and Greg Walker, Staging the Henrician Court Project (Hampton Court, 2008-10), www.stagingthehenriciancourt.brookes.ac.uk. The Staging the Henrician Court website is a great resource for anyone wanting to teach Heywood's play since it contains videos from the performance and interviews with researchers, the director, and several of the actors. Among the various 'key research topics' listed on the website, which include examinations of 'Jupiter', 'The Vice', 'The Great Hall', 'Gender', 'Humanism, Education and Political Debate in Henry VIII's England', are excerpts from various historical texts. The primary collection published from this project is Thomas Betteridge and Suzannah Lipscomb (eds), Henry VIII and the Court: Art, Politics and Performance (Surrey, 2013). From the collection, Peter Happé's essay, 'Dramatic Genre and the Court of Henry VIII', Thomas Betteridge and Suzannah Lipscomb (eds), Henry VIII and the Court: Art, Politics and Performance (Surrey, 2013), 271-86, addresses Heywood's play briefly, while Eleanor Rycroft's, 'Gender and Status in John Heywood's The Play of the Weather', 255–70, gives a rich account of gender and social status in the play — but neither of them examines the weather from an ecocritical perspective.

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- 19 Jed O. Kaplan, Kristen M. Krumhardt, and Niklaus Zimmermann, 'The Prehistoric and Preindustrial Deforestation of Europe', *Quarternary Science Reviews*, 28 (2009), 3023, DOI: http://10.1016/j.quascirev.2009.09.028.
- 20 Ibid.
- 21 By 1850, in the midst of the industrial revolution, the forest coverage had plummeted to a trace 1.9% (Ibid.). For more on the paleocological record see Jed O. Kaplan, Kristen M. Krumhardt, and Niklaus Zimmermann's 'The Prehistoric and Preindustrial Deforestation of Europe'. See also, John Manwood's, *A Treatise And Discourse Of the Lawes Of The Forrest* 1592, 4th ed. 1665 (Savoy, 1717), for a comprehensive guide to forest preservation written in response to the deforestation during Elizabeth's reign.
- 22 Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York, 1990), 45–6. See Merchant's chapter on 'Farm, Fen, and Forest: European Ecology in Transition' in her for more on the issue of mills from the twelfth through the sixteenth centuries in England.
- 23 Brian Fagan, The Little Ice Age: How Climate Made History 1300–1850 (New York, 2002), 84.
- 24 See Fagan's *The Little Ice Age* for more on the cold spell that gripped England and the rest of Europe.
- 25 Morton, Ecology Without Nature, 1.
- 26 Ibid, 5.
- 27 Ibid, 141.
- 28 Fagan, The Little Ice Age, 84.
- 29 Morton, Ecology Without Nature, 187.