On May 25, 1786, the *Affiches du Poitou* published a letter to the editor by the agronomist Maupin concerning the viticultural experiments and demonstrations he had performed. He contended that the results of his work should speak for themselves: “Facts, especially such as those that I present, are the very light to the blind. With this light, it is impossible to not see. And there is no man, however ignorant, who is not in a position to have an opinion, to judge and pronounce in the very matters in which he would have the least knowledge.” As he saw it, “the allegation of ignorance could only be a false pretense, and consequently a lie.” In his letter, Maupin privileged empiricism based on concrete evidence, which he argued all should be able to understand. He believed that when presented with clear evidence, all would come to the same conclusion about what they saw before them. He argued that those who differed in their interpretation were not merely mistaken but lying. Maupin’s letter was particularly bold, but he highlighted the way that many agronomists used the information press to link empirical evidence and *lumières*. They argued for an approach that many letter writers employed in the affiches: presenting material evidence that they themselves had observed and conveying confidence in their findings.

Maupin’s letter was one of many on agricultural improvement that filled the pages of late eighteenth-century newspapers. Recent innovation in chemistry, botany, engineering, and other scientific fields had begun to
influence thinking on agriculture, which by the nineteenth century would revolutionize agricultural practice in Europe. Yet in the decades before that revolutionary shift was apparent, the diffusion of new agricultural knowledge remained a local phenomenon. The affiches were an important site for sharing such information across geographic and social divides.

This chapter traces how new ideas about agricultural improvement were shared and debated in the press. Such conversations were informed by the political economy of the physiocrats, and by rather immediate, material concerns of food insecurity. The subject matter of their letters tended to converge around land reform, the implementation of new crops, and the prevention of disease in crops and livestock. In all cases, they were emblematic of a much larger trend among the letters: to explain in detail the experiments under way in the countryside. Letter writers recounted how long they had run their experiments, how much land each test occupied, the particular treatments applied to each field, and comparisons of the results at stages throughout the growing season. The letters in the information press thus reveal how widely agricultural reform efforts had spread. By showing the ways that diverse writers made their case to experts and practitioners, the letters to the editor offered a glimpse into the writers’ claims to authority. The information press was a significant vector through which new techniques circulated, and where practitioners and experts could share in the same conversation.

**Physiocracy, the State, and the Peasantry**

The widespread interest in agronomy garnered the attention of men of letters and newspaper readers alike, and it was shaped by the influence of economic thought. The prevailing economic model in France since mid-century was physiocracy, which was guided by the idea that commercial growth came from agricultural growth. François Quesnay first posited the ideas underlying the economic theory in his 1758 work *Tableau économique*. He also wrote the articles for “farmers” and “grains” in the *Encyclopédie*, where he emphasized the role of agriculture in creating the renewable wealth for the kingdom that nature alone could produce. Through comparisons of prices, expenditures, arable land, and harvests, Quesnay argued that large farms produced the majority of the food supply. Given that assessment, he argued that the state ought to do more to support farmers. In general, his call for the state to implement reform emphasized economic liberalization, including rationalizing taxation, cutting duties and tolls, and scaling back market controls on grain. Later, Pierre-Samuel Dupont de Nemours coined
the term “physiocratie,” meaning “rule of nature,” to describe in his 1767 essay the economic outlook Quesnay had first posited. 4

The physiocrats defined their philosophy not only in terms of agriculture and political economy. Physiocracy was also a theory of knowledge. And it was a moral philosophy that privileged evidentiary argumentation. The physiocrats envisioned education as a key element of their philosophy that would enable the public to “imbibe the true dictates of Nature.” 5 They designed primers, pamphlets, and demonstrations geared toward specific audiences, including princes, adults, and children. Physiocratic thought was especially fashionable in the 1750s through 1770s, when its strongest advocates, the so-called économistes—Quesnay, Anne-Robert-Jacques Turgot, and Victor de Riqueti, marquis de Mirabeau—were influential in royal economic policy, where they promoted fiscal reform and free trade in grain. 6

By the 1780s agronomists and political economists did not adhere strictly to all of the ideas formulated by the physiocrats, but elements of physiocratic attitudes echoed in their treatises. The continued influence of the physiocrats was also evident in the press, where writers argued that changes to agricultural practice could increase productivity. A piecemeal approach to economic principles was common at the time, as even the proponents of physiocracy did not necessarily adopt wholesale its economic and political implications. 7 Strands of thought inspired by the physiocrats continued to resonate in the prerevolutionary decades: the belief in growth coming from the land, the support for modifying the countryside, and the characterization of the peasant as a sympathetic and decent figure were all present in the letters to the affiches.

By the 1770s and 1780s French government authorities and landowners were turning resources and attention to reform. Official reports on public works drew on local grievances and observations as well as the expertise of engineers. 8 Royal administrators addressed all manner of environmental issues, including deforestation, swamps, water pollution caused by artisanal trades such as tanning, and the delivery of potable water. Academies also proposed essay contests concerned with explaining and safeguarding economic growth in agricultural and manufacturing sectors. The regional academy in Marseille posed the question, “Why has commerce grown in Marseille, and what are the means to ensure prosperity?” The Royal Society of Agriculture of Paris asked whether agricultural flourishing had a greater impact on the manufacturing sector or vice versa. 9 State officials also wrote repeatedly to the affiches to propose and implement reforms in land management, public works, and agriculture. 10 Through all of these channels, the importance of safeguarding and improving agricultural land received significant attention.
The information press participated in such discussions by inviting experts to share their opinions and by publishing local reports from practitioners. Some of the letters they published spoke rather directly to physiocratic principles. For example, one writer explained in the Affiches du Poitou the efforts to construct a new road in the Vendée from Cholet to Les Essarts. The engineers were drawing up the necessary plans; the local seigneur, Jacques d’Escoubleau, comte de Sourdis, had asked for the road; and the council had authorized construction. The writer described the count as a “good citizen and enlightened man” who understood the advantage of facilitating travel and transport for “the good of agriculture and commerce.” With similar aims in mind, Jacques Dumoustier de la Fond invited the affiches in Poitiers to publish the calculations concerning how to make the river Dive more navigable so that the public could evaluate them. The framing used to justify the merits of new roads and improved waterways echoed broad physiocratic principles.

Arguments about the need for commerce and agriculture to work together were directly addressed in a letter from “un ancien Négociant” to the Affiches de Troyes in 1784. In it, the anonymous merchant argued that “agriculture and commerce have a natural and necessary relationship: one forms the basis of our riches, the other implements its benefits.” Noting the significant attention commerce already received, he asked why there was not more state intervention in the realm of agriculture. He suggested at least two officials be assigned to oversee agricultural efforts for each province so that they could support new projects, including clearing land, developing mines, building canals, and other hydraulic interventions, all of which he characterized as means to “produire les lumières.” For this writer, the Enlightenment was something one made. His correspondence underscored the overlapping interests that writers identified in commerce, agriculture, and reform.

Ultimately, the anonymous merchant suggested that the farmer ought to receive some of the material benefits from such interventions. He suggested that administrative officials should support the efforts of seigneurial lords to implement such changes, to “exciter l’émulation” in the provinces. In doing so, the merchant emphasized that economic success relied on provincial notables, and he argued that landlords should lead land improvement projects. His outlook aligned with the physiocrats, who linked agricultural regeneration with renewal of the nobility. Quesnay had emphasized that agricultural improvement relied on the seigneur investing his revenue in the land. Mirabeau also celebrated noble landowners who lived on their estates and actively and personally managed the land, because in his estimation agriculture was the very foundation of the nation’s economy. Depictions
of landlords’ direct involvement with the agricultural improvement of their estates were prevalent in literature, such as the fictional Wolmars, and in life, such as Antoine Lavoisier.¹⁴

Some landlords echoed such a seigneurial role in the information press. In his letter to the *Affiches de l’Orléanois* the comte d’Essars synthesized the results of his agricultural observations in several nearby provinces, and in doing so, he presented himself as a landlord with keen interest and direct knowledge of agricultural production on his estate.¹⁵ Some writers underscored the position of landlords in the press by writing their appeals directly to them. For example, an anonymous letter to the *Affiches de Toulouse* invited the paper’s readers, in particular the curés and seigneurs who read the affiches, to ask their plowmen to verify some observations he had made.¹⁶ The letter concerned the impact of wind conditions on increasing the difficulty of plowing fields, but his letter was emblematic of the influence ascribed to provincial landlords and priests as instruments of reform.

Letters by landlords and parish priests also argued that concern for agriculture was a key component of good citizenship. One curé’s letter to the affiches in Poitiers suggested that observing nature served agricultural and religious purposes by preserving one’s well-being through food production, but also by encouraging one to think of nature’s author. His methods for doing so were empirical; he encouraged parish priests to record the meteorological variations of the year and the results of the harvest, so that local observations could support agricultural improvement. By emphasizing the role of the clergy as record keepers on agricultural matters, he envisioned the priest as a contributor not solely to religion but also to the state. He argued that attending to agricultural matters would bring priests to better “exercise of charity, humanity, and the duties of a citizen.” As chapter 6 will show, charity, a sense of shared humanity, and claims to citizenship were often linked in the information press. This priest’s letter called on the paper’s readers to remember that, “the needs which attach us to the plow still require such urgent work.”¹⁷ In the press, the material results of the harvest prompted a sense of urgency from writers, because it concerned their day-to-day well-being. They argued for participation in agricultural knowledge production out of necessity, and because it made one a good citizen.

Writers considered the impact such environmental and land management shifts would have on the peasantry. In their calls to modify the French countryside, writers relied on the physiocratic assumption that the land was inherently abundant. Their descriptions of the countryside were emblematic of visual and literary representations of the harvest in the eighteenth century, which emphasized the intrinsic potential of the land through depictions
of gathering, binding, and gleaning that underscored nature’s bounty. In lieu of the muscular peasants laboring in the fields in seventeenth-century imagery, the peasantry in eighteenth-century visual culture were recast as decent, unthreatening, and sympathetic.18

In the letters to the affiches, writers considered the condition of the farmer in sympathetic terms, formulating a vision of the peasantry as essential members of the kingdom. In one letter published in Troyes, a schoolmaster wrote to the paper asserting that people in the countryside should be assured “an honest subsistence.”19 In the Affiches de l’Orléanois a surgeon underscored that agricultural welfare was the basis for national welfare, and as agricultural producers, peasants were the most important group to the state, even though he noted they were not treated that way.20 In a letter to the Affiches du Poitou, a curé described his attempts to educate plowmen on the treatment of soil in fallow fields, but his letter acknowledged their agency, for “the key to the granaries is in the hands of the laboureurs.”21 The priest asserted that the willingness of laboureurs to adopt new techniques would make all the difference. As such examples illustrate, writers expressed an optimism that it was now within human capacity to change the conditions of the peasantry, even as they suggested that such changes should be led by state officials and traditional social elites. Even in the arenas of reform advocated by the affiches, social hierarchies persisted. Their correspondence communicated the material limits that the peasantry faced as they argued for change.

In the press, reform relied on a sense of fellow feeling for the farmer. For example, a letter to the newspaper in Troyes appearing under the title “économie” described a rich area of at least five thousand acres of arable land along the banks of the Aube that had once been very fertile but was depleted at present. The poor soil conditions were compounded by the river’s patterns of rising over the banks, which caused flooding that endangered the peasantry and their crops: “Far from contributing to the cultivateur’s prosperity, the flooding tends, on the contrary, to substantially diminish his means. . . . One feels how such inconveniences are prejudicial to the general good and to his own.”22 In addition to describing the material effects of the overflow, empathy for the peasantry was central to the letter writer’s argument. To prevent further flooding and ensure consistent harvests, the writer suggested a public works project to raise the banks of the river. Letters such as this one that considered the condition of the peasantry emphasized their ties to the agricultural and financial health of the state. The recasting of the peasantry as significant, sympathetic figures with agency of their own contributed to the social imaginary the press fostered. Letter writers established
the importance of the material experiences of food producers and in doing so situated the affiches as a space that was interested in their perspectives.

**Facing Real-World Problems**

The desire for agricultural reform was driven in part by persistent food insecurity. The profound irregularity in securing the grain supply continued throughout the early modern period and was compounded by unpredictable weather and inequality in resources. Historians now know that the seventeenth century was indeed the Little Ice Age, a period of particularly cold winters and short growing seasons that were a product of lower solar activity, increased volcanic activity, and an especially high frequency of El Niño storm systems (ENSO).\(^{23}\) The climate in Europe in the eighteenth century was generally warmer after the end of the Little Ice Age in about 1715. The conditions of the winter of 1788–89 are particularly well known by historians of France, but that winter was part of a longer period of erratic climate that spanned from the 1760s to approximately 1820. In these years, irregular weather patterns caused by ENSO, volcanic eruptions, and a period of decreased solar activity known as the Dalton minimum brought cold winters in Europe and North America, drought in India, and massive hurricanes in the Caribbean.\(^{24}\) Especially after 1788, letters to the editor published in the affiches commented directly on the impacts of the climate on growing conditions throughout the kingdom.\(^{25}\)

The preoccupation with food security remained prevalent in the eighteenth century. As Daniel Roche has emphasized, food supply in France relied “to a huge extent” on grain consumption. Most of France still depended on grain for making bread, which constituted the majority of a peasant’s diet. Grain consumption accounted for between one-half and two-thirds of one’s expenditure, and average daily bread consumption was approximately 1,200 grams.\(^{26}\) The process of provisioning French cities was an arduous task, and while Paris was mostly supplied with wheat flour, provincial centers searched for a viable supplement for wheat flour out of necessity. The pursuit of suitable, nutritious substitutes preoccupied a wide group of experts who campaigned for new crops and studied the nutrition of bread.\(^{27}\)

While eighteenth-century innovations in new crops, land management, and agricultural techniques had alleviated food insecurity somewhat, fluctuations in grain harvests triggered spikes in bread prices throughout the last decades of the eighteenth century. In an effort to resolve the subsistence problems that had troubled France for centuries, the French government undertook massive reforms by liberalizing the grain trade, first with
domestic deregulation in 1763 and then with freedom of export in 1764. The implementation of the reforms coincided with a subsistence crisis, which began in 1765, when grain shortages were exacerbated by the disruption in the supply trade. Prices doubled and, in some places in the kingdom, tripled. As economic conditions worsened and public opposition grew, the government decided to end the plan in 1770. Ending the policy brought new problems, as the police system imposed after 1770 was resisted, and in the case of the Midi, violently so. Then Louis XV died in May 1774. In September 1774 Anne-Robert-Jacques Turgot liberalized the grain trade once more. Famine and a series of riots known as the Flour War followed in 1775. The failed reforms would influence Louis XVI and his finance ministers, especially Jacques Necker. The preoccupation with subsistence was such a powerful force for the people of France that it drove royal policy responses. Moreover, through the reform attempts of the 1760s and 1770s, provisioning had become a subject for public debate. Correspondence published in the information press responded to long-standing concerns, which were especially heightened and timely owing to the recent debates over liberalization.

The Agricultural Enlightenment

At the same time, farmers began trying out new approaches in their own fields. How and why farmers who decided to adopt a new technique did so was, as Peter Jones describes it, a “highly complex and multifaceted” process where small adjustments to existing methods played the major role. And yet pinpointing and describing these incremental changes remains a puzzle for the historian—information circulated widely, but in what formats? Most eighteenth-century farmers resisted book knowledge and instead found local and material results much more convincing. Plow trials, for example, garnered expansive public interest and participation. The idea that applied knowledge was more useful than books was shared by Antoine Lavoisier who lamented the lack of empirical evidence in theoretical agricultural writing. Lavoisier’s model farm at Fréchines was an attempt to offer concrete proof of the benefits of new agricultural approaches. The notion that model farms such as Fréchines might influence farmers in the region to change their techniques was a popular one in the late eighteenth century. Agricultural societies founded experimental farms in Limoges, and there were similar efforts undertaken in Lyon and Riom. Learned societies launched competitions to reward farmers with increased productivity and organized the distribution of new seeds.
The forum of letters to the editor was one of the rare places where book learning and practical knowledge came together. The widespread interest in field demonstrations in the affiches rested on the premise that improvements that yielded material results encouraged the wider adoption of new techniques. At the same time, agricultural writers produced theoretical tracts for the most part, rather than concerning themselves with the work done by the people laboring in the fields. Writers to the affiches were aware of the resistance between the two circles. As one parish priest writing on the condition of field workers near Civray put it, in his experience, “We often learn much better with a good laboureur than with traités d’agriculture.”33 It was in the information press that the diffusion of new, applied knowledge and techniques happened.

Eighteenth-century discussions between savants and field workers were rare, but in the affiches they participated in an ongoing conversation. Writers used the vocabulary of économie, or reform efforts to better manage one’s existing resources and maximize new ones, to discuss and debate agricultural improvement; a shared vocabulary afforded reformers from a range of backgrounds a basis for formulating improvements.34 Public interest in economic reform expanded in the eighteenth century, as agronomists and lay readers consumed a growing literature concerning natural history, agronomy, and technology. The extensive correspondence on agronomy and animal husbandry reflected, at least in part, that writing on this topic was considered polite, a suitable topic for genteel conversation.35 Moreover, the affiches offered an avenue for expanding agricultural discussions to a wider audience. By comparison, at the university, even in fields such as botany and agronomy, gardeners and amateurs were treated as participants but not full partners in the research they conducted.36 In short, agriculture was a socially acceptable basis for writing a public letter to a provincial newspaper and a topic with which many had direct experience. Rather than focusing on one’s position in society, the debates over agriculture in the information press turned around firsthand knowledge.

The Circulation of Practical Models

Writers to the affiches privileged practical suggestions that their fellow readers could implement, and their letters reflected the major areas of attainable innovation in eighteenth-century agriculture. Soil fertility garnered considerable attention across Europe at this time.37 The French information press was no exception to the trend. As the discussion above of the press coverage of the peasantry indicated, writers throughout the kingdom wrote to the
affiches to offer suggestions on how best to prepare fields. They debated the methods of clearing and preparing land for grain cultivation. Because they relied so heavily on wheat, French farmers had to leave some of their land fallow in order to allow for tired soil to regain the requisite nutrients. Whether cultivators ought to enrich the soil by burning their fields, letting them lie fallow, or using fertilizers were all up for debate in the affiches, and the letters from readers cited books, other accounts in the paper, and their own experience on the subject. While the particular solution proposed varied, the published correspondence shared a how-to format that could serve as a resource for practitioners.

In the information press, a popular solution to soil conditions was to plant fodder crops that would feed livestock. The adoption of fodder crops was likely informed by British techniques, where farmers raised root vegetables such as beets and turnips and foraging legumes that supported larger herds of livestock; in turn, these crops supplied nutrient-rich manure for the soil. Writers to the affiches tried out similar approaches for themselves. One anonymous writer compared the merits of sainfoin, alfalfa, and clover, which he had cultivated alongside one another; he also weighed his own experience against what he had read about the crops. Ultimately, he found that sainfoin was not so abundant at the first harvest as his reading had led him to anticipate. Rather, he suggested that there was much land where sainfoin and alfalfa did not thrive; in his comparison, clover was less delicate to raise but less useful as livestock feed. Alfalfa and sainfoin were used at first in the manner that this farmer employed them—to enrich soil for cultivation. Alfalfa, sainfoin, and clover all had the added benefit of serving as fodder crops, and most farmers could sell their clover crop at market or graze their livestock on it. The strategy of raising fodder crops for livestock was a model that continental reformers supported. In the French information press, writers put fodder crops to the test.

Among the letters that discussed the adoption of British agronomy in France were those from one of the leading agronomists of his day, Abbé Henri-Alexandre Tessier, whose letters appeared in the papers in Paris, Grenoble, and Poitiers. His earliest letter to the Journal de Paris appeared in 1777, shortly after the agronomist and physician became a member of the Royal Society of Medicine. Most of his correspondence with the information press took place after 1783, when he entered the Academy of Sciences and the Society of Agriculture of Paris. In 1787 he would become the director of the royal experimental farm at Rambouillet. Tessier’s letters included detailed accounts of total seeds planted and crops harvested at Rambouillet and comparisons throughout the kingdom. His letters in the 1780s
demonstrated how the experimental farm implemented British techniques; he designed Rambouillet and the letters he wrote about it as a model that other farmers could follow.

Tessier emphasized in his correspondence that the timing for planting fodder crops was key, and on this point, unknown farmers writing to the affiches agreed. “Le pauvre Laboureur” emphasized the importance of planting at the proper moment in his letter to the Journal général de France. The anonymous plowman sowed his fields, which he would otherwise have left fallow, with fodder crops as soon as he had harvested his rye. He described his process of irrigating the field in advance to prepare the seeds for germination in hopes that the fodder crop would begin to grow in October before the winter set in. Writers also shared methods of fertilizing the soil with lime in the affiches. Lime neutralized the acid in the soil, which enabled farmers to use fields that they would otherwise have had to let rest, but it required substantial resources to quarry, burn, and transport it to fields. Fodder crops, by contrast, were a rather affordable alternative.

In their discussions of agricultural innovation, the affiches also touted the merits of root vegetables such as the turnip, beet, and potato. Such vegetables were cultivated in kitchen gardens in the eighteenth century. Root vegetables allowed for a break in the monotony of grain-centered diets, and the diversification in diet through vegetables helped stave off scarcity. Root vegetables were hardy and caloric, and they served as a supplement to a wheaten bread diet. Agronomists’ advocacy for the turnip, the beet, and above all the potato appeared in specialist publications with a new urgency in the 1780s. The letters to the editor in the information press reveal that the campaigns for the root vegetable won over adherents throughout the kingdom. Writers to the affiches on this theme included the intendant of Paris and members of the Royal Society of Agriculture. According to a letter by the marquis de Lormoy, turnips were suitable for farmers who wanted to graze their animals on the same land where the root vegetable grew. He organized his estates in Marquanterre according to the English farming model. In his letters from Lorraine, the Abbé de Commerell presented specific instructions about how to sow root vegetables, prepare the soil, and determine when the crop was ready for harvest. He used his letter to advertise the beet to cultivators who might wish to grow root vegetables the following season, and he enclosed instructions about how to subscribe with him. The information press touted the ease with which root vegetables could be cultivated and encouraged their adoption.

Letters lauding the potato’s merits were especially prevalent in the newspapers. Potatoes were a subject of popular interest throughout the 1770s
and 1780s because of their hardiness and high caloric content. For their part, the Academy of Besançon had dedicated their 1772 essay competition to the study of nutritious vegetables that could ward off famine. Antoine-Auguste Parmentier won with his essay on the potato, though all five of the essays submitted argued that the potato was the best solution to food insecurity. Recipes that included potatoes appeared in the information press. State and local officials interested in agricultural reform commented in the papers on the conditions of the growing season and their effect on the potato harvest. Writers to the affiches celebrated the potato for its utility as food suitable for people and livestock alike. Curés wrote letters about the fields they set aside for potato crops and the distribution of the harvest to those in the parish. A curé living near Alençon also referenced research that informed his potato farming, such as pamphlets published by François-George Mustel and by the botanist Henri Louis Duhamel du Monceau. A notary and receveur cited Roger Schabol and Claude Durival’s work on potato cultivation and suggested its benefits for feeding livestock in his letter to the affiches published in Metz. The references to books and pamphlets in the letters to the editor situated the information press as a site for distributing and debating new and useful information. As writers shared their experiences from their own fields, gardens, and books, they commented on the methods they tested and applied.

The search in the information press for suitable supplements to wheat flour underscored the common concern and collective efforts of writers to improve access to bread. For example, one anonymous writer suggested acorns as a supplement, which when soaked and boiled were edible. The writer insisted that his recipe was at least better than black bread, which consisted mostly of rye flour. The campaign for the potato grew with the advocacy of Antoine-Augustin Parmentier, whose 1777 manual, *Avis aux bonnes ménagères des villes et des campagnes sur la meilleure manière de faire leur pain*, included recipes for potato bread that required only hot water, salt, potato pulp, and starch. The finished loaf had the appearance of wheaten bread, and it did not require expert handling. Antoine-Alexis Cadet de Vaux, one of the editors of the *Journal de Paris* and a friend of Parmentier, published content in his paper on the utility of the potato. But the descriptions of potatoes as a basis for bread appeared in newspapers throughout the kingdom. The potato was by far the most popular alternative to wheat flour in the press, and the campaign for its adoption in the affiches showed the widespread interest in nutrition in provincial centers.

Writers also proposed new wheat alternatives in which they underscored how effective the newspapers were in prompting their decision to try a
product for themselves. New crops advertised in the papers included a variety of buckwheat they called blé noir (which was also referred to as blé de Siberie, or blé de Tartary). In the affiches in Compiègne a merchant named Lange documented his success in growing the new buckwheat. He urged anyone interested in trying the crop to write to him, and he would sell them any amount at three livres a bushel. In a similar letter published in Grenoble, the writer explained that the grain was suitable for planting between April and July, and each plant produced “50, 100, 1000 to 2000 grains, according to the bounty of the earth or to the fertilization and preparation one had done—the grain succeeds in all sorts of situations and terrains.” While it needed more water, the grain was particularly hardy, made a nourishing bread, and held up well in storage since it was resistant to pests. The writer to the Affiches du Dauphiné trusted that the merits of the grain were so extensive that he concluded his letter with the declaration, “In a few years, we will not cultivate any other grain; it will be a great resource in case of scarcity.” The problem of scarcity was not merely a rhetorical flourish. Poor harvests and food insecurity were especially persistent in France outside of the Paris basin.

The Limits of Agricultural Knowledge

Finally, the problem of pests and diseases that afflicted crops preoccupied many writers, especially when the remedy was unknown. In some cases, they offered home remedies to eradicate pests without knowing exactly why a particular solution worked. For example, a writer to the affiches in Metz shared how he had effectively kept dormice from destroying his espalier fruit trees by applying crushed fern leaves behind the fruit. He warned the editors, “Do not ask me why, sirs, the fern could produce such an admirable effect, because I confess I do not know.” For him, it sufficed to know the technique yielded results: “I know an expedient to preserve my fruit, and that is enough for me.” Letters that shared remedies to eradicate rodents, caterpillars, aphids, and wasps adopted a similar approach, as they offered a solution the writers had devised even when they were unsure of exactly why their technique proved effective.

Animal husbandry in particular presented a host of questions that writers were ill equipped to answer. Veterinarians wrote letters to the editor describing diseases and known remedies for livestock. Letters documenting the spread of the maladie rouge that attacked sheep and other livestock, especially in the Sologne region, garnered repeated attention in the press. The disease afflicted livestock who were put out to pasture and then later would evacuate blood, even from the nose and eyes. Letters to the affiches in the
provinces documented the disturbing symptoms and debated how the disease was communicated. Henri-Alexandre Tessier was among the experts who worked on the disease. Most of the discussion of diseases in livestock read like local observational reports, which writers eagerly sent to the press. The primacy of letters in the information press that relied on direct experience at times exposed the limits of the contributor’s knowledge and instead settled for increasing awareness.

The most common complaint of disease appeared in letters from farmers, priests, and agronomists throughout the kingdom, who wrote to the affiches to describe a wheat blight they called *blé carié, chamois, or charbonné*—a fungus that afflicted wheat, turning grain into a putrid dust that quickly infected healthy grain in the field and the storehouse. The Royal Society of Medicine commissioned research into the cause of the disease in 1777. Throughout the 1770s and 1780s, the interest in understanding the cause and curbing the contagion preoccupied lay practitioners too. Through published correspondence, they tried to “crowdsource” some way to stop its spread.

The lack of definitive answers about the causes of the wheat rot led many editors to publish letters from their readers that addressed the problem and proposed a remedy. By inviting their fellow readers to confirm their findings, writers working on wheat blight adopted a collaborative approach that connected state officials with practitioners. Such was the approach of a curé writing to the paper in Amiens who recommended storing harvested grain in baskets, which in his experience had kept the grain free of contamination. Henri-Alexandre Tessier offered his expertise on the ongoing debate over wheat blight to the press in August 1785. While his findings were more detailed, he traced analogous questions and followed a similar format to the other letters to the editor on the disease. His solution was to treat the seeds with diluted lime. He explained the conditions for soaking the seeds, provided concrete numbers on how much lime was suitable to use per bushel of wheat, and explained why the fungus that attacked the wheat was so problematic. His letter relied on evidence-based reasoning in which he had tested the theories described in treatises through his own extensive experimentation.

Investigations into wheat diseases foregrounded the role of collaboration with farmers in finding a remedy. The Abbé Genty, a secretary for the Royal Agricultural Society in Orléans, suggested a lime bath was not enough to protect seeds from disease: “Convinced by numerous experiments,” he argued that the best way to get rid of the fungus was to beat and clean the grain set aside for seed, and to keep it sealed in the barn, away from the straw. Genty’s recommendation relied on experiments that a plowman from
Saint-Florent had conducted, and on the results he had communicated to the agricultural society.\textsuperscript{65} A few days later, the paper in Poitiers published an account that also relied on a method that a skilled cultivateur had applied.\textsuperscript{66} The results that were published in the affiches were ones worked out in fields by agronomists and farmers together. As one anonymous letter published in the \textit{Journal général de France} put it, “Agriculture is an art founded upon the experiment.”\textsuperscript{67} The knowledge privileged in the press consisted of methods that the writers had tested or observed. As the fine-grained descriptions of the wheat blight and how to stop it suggest, the explanations in the letters were at times contradictory, leaving the readers to discern for themselves which approach to employ.

\textbf{Emulation in the Information Press}

The affiches relied on material and observational results to convince readers of the efficacy of new agricultural approaches. The emphasis on experimentation within the letters enabled writers to link the arenas of learned expertise reliant on print with the practical results they had worked out in fields. The emphasis on applied knowledge in the affiches underscores that the agricultural Enlightenment was overwhelmingly practical.\textsuperscript{68} A culture of emulation was central to agricultural reform in the eighteenth century, when plowing races, fairs, and model farms fostered imitation and competition. The letters in the information press communicated the importance of applied knowledge on a wide scale. Writers expressed the hope that their fellow readers would try out the methods published in the newspaper.

Once again, writers focused on a range of agricultural topics that collectively articulated the newspapers as a key site for the diffusion of useful knowledge. Situating the information press in this way also bolstered the calls for emulation in the letters. Especially in the correspondence on agriculture, the newspapers privileged precise and simple instructions. Lottinger, a correspondent of the Royal Society of Medicine, emphasized the importance of instruction when he wrote to the affiches in Metz to share his method of fermentation for wine production. He listed his observations and offered step-by-step direction about each stage of production, guided by the principles in the enologist Olivier de Serres’s \textit{Théâtre d’agriculture et ménage des champs}. Lottinger thus intended for other readers of the affiches to be able to follow along and replicate his findings. In the editorial note after his letter, the editors suggested Lottinger consider the use of the hydraulic valve by D. Casbois, of which they assumed Lottinger was unaware when he made his observations.\textsuperscript{69} The feedback between writer, editor, and the works
they cited reinforced the sense that the steps a writer had followed could be picked up and applied by other readers of the newspaper. The dialogic, iterative nature of the affiches was foundational to the way that letters writers interacted with the paper.

The particular crop or cultivation technique varied from letter to letter, but writers participated in the information press by sending in how-to suggestions of their own. They offered technical advice on vineyard cultivation, plowing techniques, and wine making.⁷⁰ In a letter touting his method for promoting better growth of arbors and hedges, Huvier de Mes followed the organizational structure that other letters had modeled; he identified a common problem, then offered an explanation of just how he had devised a solution. He described the amount of shrubs he planted, the appropriate distances between plants, the size of the plants, and so on, so that others could replicate his work. Then he assured the reader that the approach was well tested on his own land for the past three years. He also eschewed credit; while he said he was the first to adopt this approach in his town, he noted he had not invented it, as the technique was in use in other provinces.⁷¹ How-to accounts like this one spoke to the success of a method—in this case the cultivation of hedges—that the writer had tested. Their explanations also identified what they had read, how long they had worked on an approach, and just how they had accomplished their task. Moreover, they offered concrete evidence—material proof that the approach worked.

Some writers went further still, suggesting that the affiches were critical to the diffusion of useful and proven improvements. The academician and agronomist Jacques Joseph Ducarne de Blangy wrote to the Journal général de France to express what he felt “the interest of humanity” demanded. Blangy read multiple papers and pamphlets, and he wrote to the Parisian paper to corroborate findings in other sources.⁷² In doing so, he connected the affiches throughout the kingdom together as a collective repository of practical information.

A particularly forceful letter on the role of the paper in collecting knowledge appeared in the Journal général de France, where a writer urged the paper to take a more systematic approach to the publication of agricultural information. Since “agriculture is one of the essential parts of the journal,” the anonymous writer suggested the editors should insert more crop surveys from different parts of the kingdom, and all such accounts should appear in the same form. The letter included a template of just what the surveys ought to include: the distance from Paris and from the main highways, the amount of land, the number of houses and other structures per acre, the conditions of the soil, the crops cultivated by acre, and the harvest yielded.
While he expressed some uncertainty over what other possible questions correspondents ought to include in their reports, he thought collecting such details was important. As he put it, “I think [the reports] would be useful because of their accuracy.” In calling for the collection of accurate and useful knowledge, writers asserted that the affiches should play a critical role in data collection.

The newspapers were influential for readers that craved standardization and distribution of trustworthy evidence, and some writers reflected on the impact the information in the affiches had on their behavior. Subscribers noted the influence that previous accounts in the paper had on their decision to change their planting practices. A letter from Poitiers made such a case: based on previous articles in the paper about the merits of a new variety of buckwheat, the writer decided to test it on his own land. He bought a bushel of seeds, shared them with his neighbors, and planted them. Based on his initial results, he speculated that the harvest would provide enough bushels so that he would not need to rely on seeds from neighboring provinces in the future. By situating himself and his target audience on the same plane, the writer suggested that people like him could benefit from his experience. Moreover, he emphasized that to appreciate its merits, the crop had to be tried out.

While the particular crops or techniques they advocated differed, letter writers throughout the kingdom identified common problems and offered solutions they had tried for themselves. Their letters adopted a how-to format that offered precise details so that readers could follow along and implement the techniques on their own. Moreover, they argued that the information press had a key role to play in cultivating emulation. They asked the editors of the affiches to publish more letters on agricultural topics, and they called for the standardization and proliferation of accounts from the provinces. Moreover, the contributors came from a range of social backgrounds, which included academicians, local notables, and cultivators. In this way, the newspapers bridged the arenas of learned expertise reliant on books and of technical knowledge practiced in fields.

Claiming Authority

Through their published correspondence, writers established their authority to speak on social and empirical grounds, and in doing so they situated the affiches as a channel that spanned geographic distance and social distinctions. The agronomist Maupin used the information press to advocate for greater public interest in agriculture: “The public, so curious and so eager for
an infinity of things that often have little or no importance, is, in general, so cold on all matters of agriculture.” Maupin took it on himself to educate and inspire the public, as he put it, to warm it to instruction and, above all, to put new and sound techniques into practice. For him, sharing useful knowledge was not enough. Maupin noted he had twenty-seven years’ experience in vineyard cultivation, had published his first work of instruction twenty-three years earlier, and had spent the past fourteen years in the employ of the state. Moreover, he wrote that he had worked on comparative and what he called “authentic” experiments consecutively for the past nine years. In describing the extent of his experience in the field, his published writing, and his employment, Maupin situated himself as an authority on the subject whose work the reader ought to trust. To do so, he emphasized his time in the field much more than his education or erudition.

The communication of agricultural knowledge in the affiches relied on empirical, firsthand evidence. Much of the correspondence on agriculture communicated examples the writers had worked out for themselves. A writer to the Affiches de l’Orléanois described his twenty years of experience and the sixty years of experience of a cultivateur with whom he worked as the basis of his solution to wheat blight in his fields. He explained that his recommendations were built on a series of experiments he had conducted, and he provided step-by-step instructions so that readers could adopt his technique. By sharing not only their results but also their methodologies, writers offered material proof for the newspaper to distribute. In doing so, writers actively shaped a role for the press and justified their own contributions.

By privileging material results, letter writers also identified the people they wanted to convince. For example, in one account written under the pseudonym of “un pauvre laboureur,” the writer offered the results of his experiments on fertilizers and seed preparation. He had divided his land into three sections of ten acres each, and each section received a different treatment to vary the acidity in the soil where the seeds grew. The writer ultimately discovered that all of his plants were susceptible to blight, so he asked his fellow readers to offer suggestions on how to combat the contagion. In soliciting their feedback, he said their responses would provide “the most essential service to several honest laboureurs, who, like myself, seek only their own education and to improve agriculture.” He asked the editor to make his letter public “after having given it a more suitable form; for I know how to plow better than to write, but both have their utility.” The editor included a short note at the end of his letter indicating that he printed the laboureur’s letter as he received it, since he “wrote as well as he plowed.” Whether the letter was written by an actual plowman or not, it is nevertheless significant.
that the affiches printed letters from the vantage point of farmers. In publishing content from agronomists and farmers alike, the newspapers claimed that the affiches served both audiences.

For those who could not rely on their own experience, connections to well-known figures bolstered their claims. The naturalist and future revolutionary Pierre Marie Auguste Broussonet wrote to the Journal général de France to explain how to cultivate mulberry trees and remove silkworms from the bark of the trees. Citing the work of Olivier de Serres, he asked the paper to publish his letter, because de Serres’s work was not widely known, and because of its timely relation to the large-scale trials at the Royal Veterinary School of Alfort, where his friend and supporter Louis-Jean-Marie Daubenton was chair of rural economy. Networks of tree nurseries existed not only in the environs of Paris but throughout the provinces. Languedoc had since 1723 supported the exchange and cultivation of mulberry trees, and a similar nursery network for olive trees was set up in 1785. Similar projects were under way in Burgundy. By allying himself with a prominent public figure and a widely known practice, Broussonet sought to bolster the significance of his own contribution.

Social ties based on one’s status as a parent also served to strengthen the cases for land management made in the paper. For example, a woman wrote to the affiches in Poitiers to argue for the draining of the Saint-Hilaire marshland. She also admitted that she wrote to the paper to see what people would say about her ideas. For her part, she asserted that there were many acres of land lost to the marsh, which could instead be used for grain cultivation. She defended her right to share her opinion by referencing her motherhood: “The earth is the nurturer of all of us; as a mother and as a citizen, I have the right to be as interested as men in the needs and resources of society.” By fashioning herself as a mother, she drew on a popular notion of eighteenth-century maternal devotion, which relied on both sentiment and personal experience. The image of an idealized mother who devoted herself entirely to the emotional and physical care and education of her child circulated in the eighteenth century in print and visual media. Emphasizing her particular stake in society as a mother and citizen, this writer drew on a familiar and compelling rhetorical framework to gain her readers’ attention, articulate her commitment to society, and claim the authority to speak in the press.

While some writers identified their concern via their role within a family, others expressed the authority of their contribution in light of their concerns for humanity as a whole. In a letter to the Affiches de Troyes in 1784, Pierre Collot described in detail the experiments he had conducted with a new wheat variety, listing what he did on each day, what the weather conditions
were at that time, and the state of the wheat at each stage. He also credited the newspaper with introducing him to the product in the first place. Once he had read about the wheat strain in the paper, he found a farmer “respected for his dignity and zeal for humanity” who had given him some seeds to plant. In his letter he shared his findings, and he was prepared to share the wheat with other “curious agriculteurs” interested in doing small trials of their own. His approach reflected the values shared by many “sentimental savants” in the eighteenth century. In framing the farmer’s credibility in light of his zeal for humanity, Collot underscored his preoccupation with the public good and situated himself as a sociable writer who cared for others.

For many writers, the authority to speak in the affiches rested on one’s ability to demonstrate that their findings could be observed, tested, and, above all, put to use. Such an affinity for usefulness was not an end in itself but instead an expression of one’s public virtue. One anonymous writer to the newspaper in Orléans appealed to the editor to publish his letter on the basis of its usefulness, which he said was a credit to the newspaper: “If periodicals deserve the recognition of the region for which they were made, it is doubtless when their object is public usefulness. This one at whose head you are, is among their number: the merchant and the landowner find here instructions and lumières concerning their mutual interests.” In a similar manner, a letter published in the Affiches d’Angers and republished in the Affiches de l’Orléanois emphasized that usefulness was the heart of the affiches’ role. The writer opened the letter by arguing that as far as he was concerned, “to make oneself useful to your fellow citizens is, according to me, first among our duties.” Writers argued that their investment in society was manifest in the usefulness of their letters.

The sense of responsibility to one’s fellow citizens was direct in letters on agronomy, which emphasized the material impact of agricultural reform on people’s lives. The justifications that writers gave for their ability to speak emphasized empirical facts, social ties, and usefulness. In making such claims, writers offered a vocabulary for the kind of knowledge that was valuable, and they situated the affiches as a key locus for information sharing. They also gestured toward the audiences they wanted to reach by invoking farmers and agronomists in their correspondence. Even more than the published correspondence on lightning rod implementation in chapter 4, letters about agricultural improvement revealed how writers tried to convince one another to adopt new techniques.

While practitioners were not treated as equal partners in university settings or scholarly discussions of agronomy, those with practical knowledge
became part of the conversation in the affiches. The reliance on material results in the press opened up an opportunity for those with experience to make new claims about their social or professional authority. Editors cultivated conversations about empiricism and authority by printing letters from theorists and practitioners who presented evidence that their fellow readers could evaluate. By printing letters by engineers and agronomists, amateurs, state officials, seigneurial landowners, parish priests, and actual farmers, the affiches acted as a bridge for the diffusion of useful and practical knowledge.

As the debates in the press around agricultural subject matter, such as fodder crops, buckwheat, and wheat blight, illustrate, letter writers did not necessarily reach a shared conclusion about how to proceed. Nevertheless, their debates show the curiosity of the writing public, who wanted to compare their own findings with the work of other practitioners across the kingdom. Although some letter writers lamented that the public was not interested in agricultural questions, the information press makes clear that, on the contrary, people could not stop talking about them.

Agricultural innovation in the eighteenth century occurred in a small-scale manner, but the affiches reveal how new knowledge was communicated and applied by practitioners. Motivated by their desire to be useful, to support the public good, and to ensure the wealth and well-being of France, agronomists wrote to the newspapers to inspire emulation among their fellow readers. Such letters emphasized the applied, experimental nature of their work. The processes that writers and editors described in the press reflected a preoccupation with incremental innovation that would improve the material circumstances of everyday life.

The practical examples published in newspapers shed new light on the early and incremental processes of agricultural change that would become so evident in the nineteenth century. Beyond books and laboratories, practical agronomy took root through model farms, seed sharing, and letters to the editor. Contributors asked the paper to print more reports, they offered suggestions about what kinds of correspondence they would find most useful, and they explained how previous letters in the paper had inspired them to change their cultivation practices. Even in remote provincial regions, collaborative work thrived. As one writer with a new method put it, he believed his technique was “too interesting to not announce it publicly, so I am using the route of this paper which is spread throughout the province.”

The information press had become an important vector for the communication of reform.