Moser v. Thorp Sales Corporation: The Protection of Farmland from Poor Farming Practices

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MOSER v. THORP SALES CORPORATION: THE PROTECTION OF FARMLAND FROM POOR FARMING PRACTICES

In Moser v. Thorp Sales Corp. the Iowa Supreme Court addressed the issue of the liability of a farmer who occupies land owned by another for damages to the land caused by erosion. The erosion damages allegedly were accelerated by the particular cultivation practices employed by the farmer in possession of the land. The Moser court agreed that a farmer could sustain liability under these circumstances. It split, however, on whether damages should be awarded in this particular instance. This decision presents an anomaly because of the court's finding that liability exists without awarding damages in the face of clear physical injury.

INTRODUCTION

It is man, rather than nature, who inflicts the greatest amount of harm, to the land in the form of erosion. This is true despite the natural character of erosion. The reckless cultivation of farmland and the deforestation of hillsides among other of man's acts provides the circumstances under which the wind and water can cause erosion or cause erosion to occur at accelerated rates. This note focuses on the physical injury to the land itself. Erosion injures the land by the removal of topsoil, subsoil and by the creation of gullies which reduce the productive and resource value of the land.[1]

It has been stated that three types of land have always been subject to misuse: the land of absentee owners, tenant occupied lands, and land which was or has become submarginal.[2] These three types of land, in addition to lands in which the person in possession acquires that possession adversely or by trespass, gained some degree of protection from mismanagement and exploitation by the decision in *Moser v. Thorp Sales Corp.*[3] That decision recognized that individuals in possession of land owned by someone else can be held legally responsible for the soil erosion caused by their unreasonable agricultural practices.[4] The *Moser* court appeared unanimous in holding that liability could be imposed in such circumstances: it disagreed, however, on whether liability and damages should be imposed in this instance.[5]

This note discusses the duty or legal responsibility of one in possession of farmland owned by another to protect the land from injury. It also discusses the standard of care applicable to the question of whether liability

1. Indirect effects of erosion include air and water pollution, damage caused by the depositing of soil upon other lands and in streams and reservoirs. Milde, *Legal Principles and Policies of Soil Conservation* 20 FORDHAM L. REV. 45, 71 (1951).

2. *Id.*

3. Moser v. Thorp Sales Corp., 312 N.W.2d 881 (Iowa 1981).

4. *Id.*

5. *Id.* at 884.

should be imposed. The note concludes with an analysis of the proper measure of damages where injury to the land is caused by erosion.

FACTUAL SETTING

The litigation involved in *Moser* was precipitated by a seller's refusal to convey land under the terms of a sale's contract.[6] The land to be conveyed under this contract was a 285-acre farm located in the hill country of northeast Iowa.[7] This contract was executed between the plaintiffs as buyer and Richard Schmitt as seller on December 1, 1971, with the closing set for January 15, 1972.[8] Schmitt, however, refused to perform under the contract. Before the plaintiff could file suit for specific performance, the mortgagees of the farm foreclosed.[9] At the foreclosure sale, ITT Thorp Corporation purchased the farm. The plaintiff filed suit in 1973 against Schmitt seeking specific performance, quiet title to the farm and damages.[10] Prior to the conclusion of this suit Schmitt exercised the redemption rights under the mortgage and repurchased the farm from ITT Thorp Corporation. This transaction occurred on December 13, 1974. After redeeming the land, Schmitt on March 25, 1975 sold the farm to Wood.[11] Wood occupied the farm from 1975 to 1977.[12] Wood's purchase from Schmitt resulted in the attachment of a mortgage.[13]

THE HOLDINGS OF THE COURTS IN *MOSER*

Trial Court's Holding

The trial court, after sorting through the various claims, concluded that the plaintiff was entitled to quiet title to the farm against all defendants. Because Wood had actual, imputed and constructive notice of the plaintiff's claims before purchasing the land from Schmitt, the court held that Wood was not a good faith purchaser for value without notice.[14]

The plaintiff in his complaint, prayed for damages to the land alleged to

6. *Id.*

7. *Id.* This farm was located in Clayton County, Iowa. *Id.*

8. *Id.* The plaintiffs/buyers are Clifton G. Moser and Carlys C. Moser and the defendant/sellers are Marguerite and Richard Schmitt. *Id.* The plaintiffs had made a downpayment of $8430 on the land with a purchase price of $42,180. *Id.*

9. *Id.* Thorp Finance Corp. of Wisconsin was the mortgagee of the property to be conveyed under the contract for sale between Schmitt and Moser. *Id.*

10. *Id.* The earlier case is Moser v. Thorp. Sales Corp., 256 N.W.2d 900 (Iowa 1977). This first suit resulted in an appeal to the Iowa Supreme Court but was remanded to the district court for further proceedings. The damages sought by the plaintiff was rents and profits during the defendant's occupancy. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 885 (Iowa 1981). ITT Thorp Corporation was joined as a defendant in 1974. *Id.* at 890.

11. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 886 (Iowa 1981). Wood refers to Lola Jean and Donald Woods who were joined as defendants. *Id.* at 884.

12. *Id.* at 885.

13. *Id.* Federal Land Bank of Omaha was the mortgagee and was added to the suit as a defendant. *Id.*

14. *Id.* at 886-90. Wood was held to have received notice from his real estate agent, a title opinion written by his attorney (although erroneous), and from the recorded instruments. *Id.*

have occurred during Wood's occupancy.[15] The plaintiff's claim for damages was based on the accelerated soil erosion allegedly created by the poor farming practices Wood employed during his possession of the farm. The plaintiff alleges that the specific cause of the soil erosion was Wood's practice of planting corn rows up and down the hills, his failure to implement conservation techniques and his use of a moldboard plow. The trial court denied the plaintiff's claim on the ground that the plaintiff failed to prove Wood's liability and damages by a preponderance of the evidence.[16] The plaintiff encountered considerable difficulty in establishing damages under the general damage principles.[17] The trial judge concluded that there was no showing that Wood's farming methods were any different from the methods used by other farmers in the community and that they did not violate the principles of good husbandry.[18]

Supreme Court's Holding

Wood appealed the judgement of the trial court to the Iowa Supreme Court.[19] This note addresses only the trial court's denial of the plaintiff's claim for damages arising from the erosion to the land.[20] The supreme court unanimously upheld the trial court on virtually all issues except the denial of liability and damages for soil erosion.[21]

On the issue of Wood's liability for erosion, the supreme court reversed the trial court's holding: the supreme court held that the plaintiff did, in fact establish Wood's liability for the erosion damages.[22] On the issue of whether the trial court erred in not awarding the plaintiff damages for the erosion, however, the supreme court affirmed the trial court.[23] In criticizing this second holding of the court, the dissenting opinion written by Chief Justice Reynoldson contended that, despite the weakness of the present methods of calculating damages, a remedy should have been fashioned to compensate the plaintiff for erosion damages caused by Wood's poor farm-

15. *Id.* at 894. The plaintiff's complaint also prayed for rents and profits against both Schmitt and Wood. The trial court awarded the plaintiff these damages against both defendants. The plaintiff also claimed damages to the buildings but this claim was denied by the trial court. *Id.* at 895.

16. *Id.* at 899.

17. *Id.* at 905. *See supra* notes 68-103 and accompanying text for a discussion of the application of damages rules to the facts of this case.

18. *Id.* at 905.

19. *Id.* at 886.

20. Wood occupied the land from 1975 through 1977. *Id.* at 885.

21. *Id.* at 902. The court, however, did make a minor adjustment in the amount of damages awarded for rents and profits. *Id.* at 899.

22. *Id.* at 902-03. A majority exists by combining the holding of the three dissenting justices with the two concurring justices who agreed with the dissent on the issue of liability for erosion damages. *See id.* at 902. The other four justices, although concluding that such damages could have been properly awarded to the plaintiff agreed with the trial court that the plaintiff failed to prove liability by a preponderance. *Id.* at 899.

23. *Id.* at 902. The majority here includes the four justices agreeing to the majority opinion and the two concurring justices. *See id.*

ing practices.[24]

ANALYSIS

Legal Responsibility of a Farmer for Soil Erosion

The holder of a possessory interest in real property, whether a trespasser, lessee, or owner under a claim of right, may incur legal responsibility for injuries resulting to the land from his possession. Liability attaches to a trespasser for the physical harm proximately caused by the trespasser's acts.[25] If a landlord-tenant relationship exists between the fee owner and the possessory owner the law or the lease itself imposes a duty upon the tenant to preserve the premises from deterioration and prevent damage to the leasehold.[26] The lessee, in an agricultural lease, assumes an affirmative duty to farm the premises in a husband-like, or reasonable, manner.[27] A more recent source of legal responsibility originates in soil and water conservation statutes and regulations which apply to property owners. Iowa and South Dakota, for example, impose a duty upon real property owners to maintain soil losses within the limitations promulgated by local soil conservation districts.[28] These statutes also confer authority upon soil conservation districts to enforce the soil-loss limitations.[29]

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24. *Id.* at 907. The dissent was agreed to by three justices including the chief justice. *Id.* at 903.

25. RESTATEMENT (SECOND) OF TORTS § 162 (1965). Entry to property without the consent of the owner or person lawfully entitled to possession by a person without title or right to possession constitutes a trespass. RESTATEMENT (SECOND) OF TORTS § 329 (1965). *See generally* AM. JUR. 2D TRESPASS § 10 (1974).

26. 2 N. HARL, AGRICULTURAL LAW § 8.04 [2] at 8-42-46 (1980); 49 AM. JUR. 2D LANDLORD AND TENANT § 230 at 249 (1970).

27. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 906 (Iowa 1981) (citing Brown Land Co. v. Lehman, 134 Iowa 712, 112 N.W. 185, 188 (1907); 49 AM. JUR. 2D LANDLORD AND TENANT § 263 (1970). The liability of a life tenant to a reversioner or remainderman would parallel that imposed on the tenant to the landlord. The liability of both the life tenant and leasee are determined by applying the common law principles of waste. *See generally* 4 G. THOMPSON, THOMPSON ON REAL PROPERTY § 1853, 55 (J. Grimes 1979 repl. ed.).

28. IOWA CODE ANN. § 467A.43 (West Supp. 1980); S.D.C.L. § 38-8A (1977). The commissioners of the soil conservation districts are required to establish maximum soil loss limitations by state statute. IOWA CODE ANN. § 467A.44 (West Supp. 1980); S.D.C.L. § 38-8A-6 (1977). These limitations denote the maximum level of soil erosion that can be tolerated and still sustain a high level of crop productivity economically and indefinitely. W. WISCHEMEIR & D. SMITH, PREDICTING RAINFALL EROSION LOSSES—A GUIDE TO CONSERVATION PLANNING 2-3 (U.S.D.A. Agri. Handbook No. 537 (1978)).

29. IOWA CODE ANN. § 467A. (West 1980); S.D.C.L. § 38-8A (1977). The Iowa statutes provide the authority for a soil conservation district to enjoin and abate erosion rates above the standards established for the district. The district has clear authority to enforce its standards in situations involving off-site damages upon a complaint filed by an injured landowner. IOWA CODE ANN. § 467A.47 (West Supp. 1980). One commentator, however, suggests that this authority also would extend to situations involving damages to the violating property owner's land and upon the district's initiative without the necessity of a landowner complaint. Comment, *Regulatory Authority to Mandate Soil Conservation in Iowa After Ortner*, 65 IOWA L. REV. 1035, 1048 (1980). The conservation district's power includes the authority to require a property owner to implement conservation practices. This authority, however, provides only a limited remedy because of the prerequisite that public or other cost-sharing funds be made available in an amount equal to at least 75% of the project's cost. IOWA CODE ANN. § 467A.48 (1979). South Dakota's soil conservation statutes provide that conservation districts are required to develop and adopt district conservation standards. S.D.C.L. §§ 38-8A-6, 11 (1977). These standards are to include soil-loss-tolerance

The Iowa Supreme Court, in *Moser* held Wood liable for the soil erosion without specifically identifying the source of Wood's legal responsibility. The court did, however, allude to three sources of liability—trespass, landlord tenancy, and the soil and water conservation statutes.[30] Wood's status could have been characterized to fit any of these categories.

The court's failure to specify the precise basis for liability encourages the inference that similar liability attaches to all possessory interests, whether by consent, license, or adverse to the fee owner. The rule seems to be that, irrespective of the actual or imputed status of the person in possession of the land, liability can result under certain circumstances.[31]

To establish the liability of the possessory owner of real property for damages to the land, the plaintiff must show that the injury was proximately caused by the acts of the possessory owner. The question of proximate cause, inures in the analysis of the existence and scope of liability under any of the sources of liability mentioned above. In the case of trespass the trespasser will be held strictly liable for all the damages that proximately follow from his possession. Recovery of damages under a landlord tenant or under the soil and water conservation statutes, however, would require in addition to a showing of a proximate cause a further showing that the possessory owner's actions violated the standard of reasonable care or some objective standard such as soil loss limitations.

Standard of Care: Applicable to Possession of Farmland

The general standard of care applicable to a tenant's use of agricultural land requires that the tenant practice good husbandry. Good husbandry means farming the land in a "farmer-like" manner, or in a manner that prevents injury to the land.[32] This definition, in itself, provides very little guidance to the court making the decision about whether practices in each case constitute good husbandry. The broader term "waste" encompasses the term good husbandry. Waste has been defined as the holder's unreasonable or improper use, abuse, mismanagement of a possessory interest in real property that results in substantial injury to the property.[33] What constitutes

limitations. *Id.* § 38-8A-5(3). The permit requirements established by this chapter do not apply to agricultural land-disturbing activities. *Id.* § 38-8A-17. The conservation district may, however, determine that violations exist on agricultural lands and require that the land disturber prepare and implement a conservation plan. *Id.* § 38-8A-18. These plans are subject to the approval of the district. *Id.* This action could also be taken by the district upon petition of a person adversely affected by the land-disturbing activities. *Id.* § 38-8A-20. Injunctive relief is also available to enforce these standards. *Id.* § 38-8A-21.

30. Moser v. Thorp Sales Corp., 312 NW.2d 881, 904, 906-07 (Iowa 1981).

31. *See* Moser v. Thorp Sales Corp., 312 N.W.2d 881 (Iowa 1981). The exact status of the person in possession may make a difference with respect to the proof required to establish liability and the damages that are recoverable. *See supra* notes 32-67 and accompanying text for a discussion of the circumstances that may create liability and the standard of care required of a farmer.

32. 2 N. HARL, *supra* note 26, at 8-61. *Id.* at 8-62 (citing Aughinbaugh v. Coppenheffer, 55 Pa. 347 (1867); Hubble v. Cole, 85 Va. 87, 7 S.E. 242 (1888)).

33. Pleasure Time, Inc. v. Kuss, 78 Wis.2d 373, 254 N.W.2d 463, 467 (1977) (citing W. BURBY, REAL PROPERTY, § 12, at 33 (3ed. 1965); 4 G. THOMPSON, THOMPSON ON REAL PROPERTY, §§ 1853, 1855 (J. Grimes 1961 repl. ed.)); Delano v. Smith, 206 Mass. 365, 370, 92 N.E. 500,501

"waste" or "good husbandry" ultimately will depend upon the circumstances of each case.[34] Facts such as custom of the neighborhood, character of the premises, reasonableness of the use, effect on the land, and, the social and economic conditions prevailing at the time should be considered in determining whether "waste" or "poor husbandry" exists in a given case.[35]

a. *Condition of the farmland prior to and following Wood's occupancy*

At the time the plaintiff executed the contract with Schmitt, the farm exhibited little evidence of erosion.[36] Schmitt cultivated the farm in what was referred to as "patches", and employed crop rotation.[37] These practices, together with Schmitt's tolerance for weeds, although not state-of-the-art soil and water conservation practices, nevertheless did to some degree protect the soil from erosion.[38] In 1975, when Wood took possession of the farm facts, the land was relatively undamaged by erosion.[39]

In contrast to Schmitt, Wood converted the pasture lands to row crops and fall-plowed the soil with a moldboard plow to the depth of six-to-seven inches.[40] In addition, Wood planted the total tillable acres in 1976 and 1977 to corn with the rows running up and down the hills without making any provision for grassed waterways.[41] These farming practices were employed despite the extreme steepness of the side hills.[42]

(1910). Although the principles of waste do not directly apply to trespass, they do provide an indication of what constitutes proper conduct by a possessor of land, whether possession was acquired by consent or by trespass.

34. Pleasure Time, Inc., v. Kuss, 78 Wis.2d 373, 254 N.W.2d 463,468 (1977).

35. *See* In re Stouts Estate, 151 Ore. 411, 50 P.2d 768, 773 (1935). *See also* 4 G. THOMPSON, *supra* note 27 § 1853, at 397.

36. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 903 (Iowa 1981).

37. *Id.* Farming in "patches" refers to leaving portions of the tillable acres in grass rather than converting to cultivation. *See id.* "Crop rotation" refers to the practice of growing different crops in succession on the same land cheifly to preserve the productive power of the soil. WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 540 (1976) quoted in Moser v. Thorp Sales Corp., 312 N.W.2d 881, 903 (Iowa 1981).

38. Whenever soil is left exposed, with the surface loose and dry, erosion will result. Wind erosion is principally the result of high velocity winds and the lack of vegetation cover. Growing vegetation, even if only weeds, acts as a protective cover which slows down the velocity of the wind and traps whatever soil particles are moving along the surface. Grass is one of the best covers. Grassed areas will also trap and absorb great amounts of water which reduces the amount of water runoff on the land not protected by vegetative cover. K. BERGER, SUN, SOIL, AND SURVIVAL at 341-44, (2nd ed. 1972).

39. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 903 (Iowa 1981).

40. *Id.* Moldboard plowing turns the crop residue under the surface. This increases the erodibility of the soil because the crop residue provides protection for the soil by maintaining a vegetative cover which reduces the soil's exposure to the wind and heat. By keeping the surface of the soil from baking and crusting, the amount of tillage required is reduced. In addition plant residue enables the soil to receive and absorb rainfall which reduces water erosion which is caused by the runoff of water that exceeds the surface storage capacity and infiltration rate. S. ARCHER, SOIL CONSERVATION, at 50,52 (1956). *See also* K. BERGER, *supra* note 38, at 345. It's also important to note that field equipment, such as chisel plows and sweeps provide the desired tillage but leave the plant residue on the surface. S. ARCHER, at 51.

41. Moser v. Thorp Sales Corp., 312 N.W.2d 881,903 (Iowa 1981). Grassed waterways provide protection for the soil because they catch and hold water and carry it down the slope in a safe manner and at reduced velocity. This reduces the rate of erosion. K. BERGER, *supra* note 38, at 21.

42. Moser v. Thorp Sales Corp., 312 N.W.2d 881,903 (Iowa 1981). Several factors influence the force with which the water carries away the soil: intensity of the rainfall, the degree of the

Expert testimony, on behalf of the plaintiff, indicated that the practice of planting corn rows up and down the hills doubled the erosion.[43] The expert testified that the rills and gullies between the corn rows were two-to-ten inches deep.[44] According to the plaintiff's expert witness, the average soil loss for the years of Wood's occupancy was sixty-three tons per-acre per-year.[45]

b. *Wood's farming practices and the applicable standard of care*

The trial court in *Moser* applied a standard of care based upon a comparison of Wood's farming practices with other farms in the community. From this comparison the trial court concluded that Wood's farming methods were not any different from those employed in many other corn fields in the community and were not contrary to the principles of good husbandry.[46] Chief Justice Reynoldson, in the dissenting opinion, attacked the trial court's finding and the majority's endorsement of it.[47] The chief justice, argued that soil loss limitations promulgated for the county by the soil conservation district should serve as the norm for determining whether Wood acted reasonably under the circumstances.[48] The court in *Moser* accepted the use of soil loss limitations as the appropriate standard of care.

Because Wood claimed to be the owner of the farm he had a duty to comply with the soil conservation district's soil loss limits.[49] Whether the statutory duty applies or not, the obligations imposed by these statutes do provide an objective basis upon which to determine the reasonableness of Wood's conduct with respect to the farming techniques he employed. The soil loss limits provide a standard upon which courts are to rely in enjoining agricultural practices of a property owner under Iowa and South Dakota

slope, and the length of the slope. K. BERGER, *supra* note 38, at 346. The planting of corn rows up and down steep slopes intensifies the formation of gully erosion by allowing water to channel down the corn rows. This process increases the volume of water carried in one location which will remove the top soil and will eventually undercut the soil below. *See id.* at 349. Grassed waterways, terraces, and contour plowing and planting would allow the channeling of water off the slope in a manner which controls the velocity and location of the runoff. *See id.* at 349-50.

43. Moser v. Thorp Sales Corp., 312 N.W.2d 881,903 (Iowa 1981). The expert witness was an employee of the United States Soil Conservation Service. *Id.*

44. *Id.* A "rill" refers to a small depression or channel eroded by a small stream. WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY, 1957 (1976).

45. Moser v. Thorp Sales Corp., 312 N.W.2d 881,904 (Iowa 1981). Wood occupied the farm from 1975 through 1977. The soil loss was computed by using the "universal soil loss equation". *Id.* at 903. This equation mathematically estimates average annual soil loss in tons per-acre. The equation contains variables for rainfall intensity, soil erodibility, length of slope, steepness of the slope, existing conservation practices, and land management factors. *Id.* n.4 (citing *Soil Conservation Society of America, Resource Conservation Glossary* 58g (1976)). The universal soil loss equation is commonly used in the design of erosion control systems and used to calculate soil loss limits under soil conservation statutes and regulations. *See* Moser v. Thorp Sales Corp., 312 N.W.2d 881,903 (Iowa 1981).

46. *Id.* at 905. The majority opinion on this point was agreed to by four justices.

47. *Id.* at 902. The chief justice's dissenting opinion on this point was assented to by four other justices. *Id.*

48. *Id.* at 903-04.

49. *Id.*

statutes.[50] These standards also serve as a basis for requiring a violating property owner to implement conservation practices.[51] Given the application of soil loss limits to these circumstances it would also seem reasonable to apply them to situations involving damage actions by property owners against a tenant or trespasser who engages in practices which accelerate erosion rates in excess of soil loss limitations.[52]

There is no doubt that the farm involved was substantially injured during Wood's three-year occupancy. The physical injury is clearly evidenced by the loss of sixty-three tons per-acre per-year computed by using the "universal soil loss equation."[53] This soil loss grossly exceeded the maximum limitation of five tons per-acre established for the district.[54] The plaintiff's expert witness asserted, that the soil lost due to erosion "could be replaced in about fifty years if the land was withheld from cultivation and placed in good permanent pasture."[55]

The existence of injury to the land does not, however, in itself, create liability upon Wood for the damage caused. Wind and water erosion takes place, to at least some degree, irrespective of the farming or conservation practices employed.[56] In order for Wood to sustain liability for the erosion damages, it must be established that the damages were proximately caused by Wood's farming practices and would not have otherwise occurred. The test of proximate or legal cause requires that Wood's conduct be a substantial factor in bringing about the harm.[57]

Wood claimed that erosion during his occupancy of the farm was negligible.[58] He also claimed that the practices of fall plowing with a moldboard plow and planting corn up-and-down the hills constituted commonly-accepted farming practices.[59] The trial judge concluded that Wood's farming methods were not shown to be any different from those employed in many other corn fields in the community and were not contrary to the principles of

50. IOWA CODE ANN. § 467A (1979); S.D.C.L. § 38-8A (1981).

51. *Id.*

52. IOWA CODE ANN. § 467A (1979); Woodbury County Soil Cons. Dist. v. Ortner, 279 N.W.2d 276 (Iowa 1979).

53. *See* Moser v. Thorp Sales Corp., 312 N.W.2d 881,903-04 (Iowa 1981).

54. *Id.* The plaintiff's expert witness testified that the maximum soil loss limitation for the county in which the farm at issue here was situated, was five tons per-acre. *Id.* at 904. The soil-loss limitations provide the basis for enforcement actions taken by the conservation districts against non-complying landowners. *See* IOWA CODE ANN. § 467A (West Supp. 1980); S.D.C.L. § 38-8A (1977). The constitutionality of the enforcement of the Iowa statutes was upheld by the Iowa Supreme Court in Woodbury County Soil Cons. Dist. v. Ortner, 279 N.W.2d 276 (Iowa 1979); *see generally* Ferguson, *Nation-Wide Erosion Control: Soil Conservation Districts and the Power of Land-Use Regulation*, 34 IOWA L. REV. 166 (1949); Comment, *supra* note 29, at 1035-52.

55. *Id.* at 904.

56. K. BERGER, *supra* note 38, at 340. Soil erosion, is necessary for soil formation, and occurs constantly under virgin conditions as well as in cultivated fields. Cultivation, however, accelerates erosion to the point where productivity of the soil may be lost in the process. *Id.*

57. RESTATEMENT (SECOND) OF TORTS § 431 (1965).

58. Moser v. Thorp Sales Corp., 312 N.W.2d 881,904 (Iowa 1981). (Reynoldson, C.J., concurring in part and dissenting in part).

59. *Id.*

good husbandry.[60] The chief justice, joined by four other justices, attacked this finding and the majority's endorsement of it.[61] The dissent concluded that the farming practices employed by Wood were the proximate cause of the accelerated rates of erosion experienced on the farm during 1975 through 1977.[62] In arriving at his conclusion, Chief Justice Reynoldson, stated that courts should carefully scrutinize testimony claiming that particular farming practices are commonly accepted when general knowledge and experience indicates that these practices constitute major contributors to wind and water erosion.[63]

Whether one characterizes Wood as a trespasser, tenant, or owner under a claim of right such parties should bear some responsibility for their conduct while occupying the land. The maximum soil-loss limits provide an objective standard upon which to measure the reasonableness of agricultural practices. Soil-loss limits provide an appropriate norm because they are tailored to the particular geographical, topographical, and climatic conditions of the specific area. For this reason soil-loss limits are clearly preferable to the nebulous common law standard of good husbandry.

Although custom in the community can provide evidence of compliance with the community standard, it does not, in itself, establish a prima facie case of compliance.[64] The fact that fall plowing with a moldboard plow is a somewhat common practice in the community should not establish that practice as the applicable standard of care where scientific evidence exists to the effect that such practices, combined with other factors, cause injury to the land. This is true also of up-and-down hill planting of row crops.[65]

The majority opinion, in giving judicial credence to Wood's practices, ignored scientific and commonly understood principles that those practices substantially increased the soil-erosion risk to the lands on which they were used. The creation of such risks should not constitute an accepted practice when alternative methods exist that minimize these risks at a reasonable cost. The role of soil as a natural, economic, and social resource should not be undermined by the application of a test of reasonableness based on customary practices when those practices defy scientific realities and common sense.

A majority of the supreme court held Wood liable for the damage to the land caused by the accelerated erosion during his possession.[66] The court's

60. *Id.* at 905.
61. *Id.* at 902.
62. *Id.* at 905.
63. *Id.* at 904.
64. RESTATEMENT (SECOND) OF TORTS § 295A (1965). "In determining whether conduct is negligent, the customs of the community, or of others under like circumstances, are factors to be taken into account, *but are not controlling where a reasonable man would not follow them.*" (emphasis added) *Id.*
65. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 904 (Iowa 1981). The plaintiff's expert testified that up-and-down hill planting was practiced on less than sixteen-percent of the tillable land in Clayton County that required the use of contour planting. *Id.*
66. *Id.* at 902. This majority is comprised of the three dissenting justices and the two concurring justices. *Id.*

holding on this issue necessarily includes the conclusions that injury existed and that the injury was proximately caused by Wood's farming practices. The Iowa Supreme Court's holding manifests that it was prepared to impose liability upon a farmer who while occupying land owned by someone else, engaged in farming practices that were harmful to the land itself.[67]

Damages to Real Property Caused by Erosion

a. *Damages for Injury to Real Property—The General Rule*

The general rule with respect to damages for injury to real property states that compensation should be based either upon the difference between the value of the land before the harm and the value after the harm; or, where appropriate upon the cost of repair or restoration.[68] These measures are referred to as the "diminution in value" rule and the "cost of repair" rule.[69] Courts, in applying these rules, often distinguish between permanent or continuing injuries and temporary or reparable injuries.[70] A permanent injury presumably continues indefinitely and effects a lasting change in the realty.[71] A continuing injury, as the name implies, is a recurring injury repeated over a period of time.[72] Where injury to the land is of a permanent or continuing nature, it is generally proper to apply the "diminution in the market value" test.[73] Temporary injuries are those that can be remedied, at a reasonable cost, by restoration, replacement or repair. The general rule provides that damage to real property resulting in temporary injury should be measured by the lesser of the "cost of restoration or repair" and the "diminution in value" rules.[74]

These general rules for measuring damages for injury to real property

67. The occupancy of farmland by someone other than the owner is a common feature in modern agriculture. Land is often farmed under a cash-rent or share-crop arrangement. In 1979, over forty-percent of all farmland in the United States was operated by persons other than the owners. 2 N. HARL, *supra* note 26, at 8-1 (citing *U.S. Dep't. of Agriculture, Issue Briefing Paper 3*, (Office of Governmental and Public Affairs, No. 16, July 6, 1979)).

68. RESTATEMENT (SECOND) OF TORTS § 929(1)(a) (1979). The Restatement rule also permits recovery for the loss of use and discomfort and annoyance to the occupant. *Id.* § 929(1)(b)(c). This note is concerned only with harm to the land itself.

69. 22 AM. JUR. 2D DAMAGES § 132, at 191 (1965). The cost of repair rule is also referred to as the cost of restoration rule. *Id.*

70. *See* Ward v. LaCreek Elec. Ass'n., 83 S.D. 584, 163 N.W.2d 344 (1968) (water damage to a house); *see also* 22 AM. JUR. 2D DAMAGES §§ 134-35 (1965).

71. Carr v. United States, 28 F. Supp. 236 (W.D. Ky. 1939) (damage to property caused by the construction of a military post); City of Ottumwa v. Nicholson, 161 Iowa 473,484, 143 N.W. 439,443 (1913) (involved damage to a city sewer line); Worden v. Eielenberg, 119 Minn. 330, 332, 138 N.W. 314, 315 (1912) (involved excavation).

72. Harvey v. Mason & Ft. D. R.R. Co., 129 Iowa 465,472, 105 N.W. 958, 960 (1906) (damage caused by a drainage system). The "dimunition rule" applies to the value of the premises after each repetition of the wrong. *Id.* at 474-75, 105 N.W. at 961.

73. Ulrick v. Dakota Loan & Trust Co., 2 S.D. 285, 49 N.W. 1054 (1891) (removal of lateral support causing damage to a building). 22 AM. JUR. 2D *Damages* § 134, at 195 (1965).

74. Big Rock Mount. Corp. v. Stearns-Rogers Corp., 388 F.2d 165 (8th Cir. 1968) (applied South Dakota law to the question of damaged realty); State v. Urbanek, 177 N.W.2d 14, 16 (Iowa 1970) (damage to bridge); Ward v. LaCreek Elec. Ass'n, 83 S.D. 584,594, 163 N.W.2d 344, 349 (1968); Reed v. Consol. Feldspar Corp., 71 S.D. 189, 196, 23 N.W.2d 154, 157 (1946) (damage to surface caused by unworkmanlike mining).

reflect the basic underlying principle that applies to the calculation of damages in all tort cases. This principle requires that the injured party receive a recovery sufficient to compensate him fully for his losses which are proximately caused by the wrongdoer's conduct.[75] Courts, however generally recognize that these rules only provide guidelines for determining the damages that would compensate the injured party for the harm suffered.[76] As has been stated, "There is no one measure of damages so flexible that it will fairly compensate for all injury to real property."[77] It is also important to remember that the general rules are not exact formulas: thus, t hey should not be applied without regard to whether their application in a particular case would compensate the injured party.[78]

The courts, in applying these rules to injuries, whether permanent, continuing or temporary, should consider the character, nature, extent of the injury and adapt these rules to the particular circumstances of each case. As the following discussion indicates, the situation in *Moser* provides an example of a rigid application of general rules which produced, an inequitable result.

b. *Application of the general rules to the facts in* Moser

These general principles or rules presented serious problems in *Moser* because of the unique circumstances involved.[79] The plaintiff in *Moser* attempted to conform his pleadings and proof to the requirements of these rules. In doing so, the plaintiff experienced considerable difficulty. The plaintiff's difficulties centered around the showing by Wood that despite any alleged injury to the farm during the period from 1974 to the date of trial it actually increased in value during that time.[80] In addition, the erosion damages in *Moser* were not capable of repair or restoration in the normal sense because "soil must be replaced in the same manner it was created—by natural weathering and decaying vegetation over many years."[81] The diminution in value rule must be applied where the injury to real property cannot, at a reasonable cost be repaired or restored to its former condition.[82]

75. 22 AM. JUR.2D *Damages*, § 131, at 189; Schiltz v. Cullen-Schiltz & Assoc. Inc., 228 N.W.2d 10,20 (Iowa 1975) (flood damage to a sewer treatment facility); Grell v. Lumsden, 206 Iowa 166, 170, 220 N.W. 123, 125 (1928) (damage to surface from mining operation); Ward v. LaCreek Elec. Ass'n, 83 S.D. 584, 591, 163 N.W.2d 344, 348 (1968).

76. Harvey v. Mason City & Ft. D. R.R., 129 Iowa 465, 480, 105 N.W. 958, 963 (1906); Ward v. LaCreek Elec. Ass'n., 83 S.D. 584, 591, 163 N.W.2d 344, 348 (1965); Metropolitan Life Ins. Co. v. Farmers Co-op Co., 68 S.D. 338, 340, 2 N.W.2d 665,666 (1942) (court rejected general rule in determining damages for destruction of a fence).

77. Ward v. LaCreek Elec. Ass'n, 83 S.D. 584, 591, 163 N.W.2d 344,348 (1968).

78. Thatcher v. Lane Constr. Co., 21 Ohio App. 2d 41, 254 N.E.2d 703 (1970) (removal of trees).

79. Moser v. Thorp Sales Corp., 312 N.W.2d 881,905 (Iowa 1981).

80. *Id.* The value of farmland, not unlike the value of other items in an inflationary economy, has markedly increased in recent years.

81. *Id.* at 906.

82. Grell v. Lumsden, 206 Iowa 166, 169-70, 220 N.W. 123, 125 (1928); Moser v. Thorp Sales Corp., 312 N.W.2d 881, 905 (Iowa 1981) (citing RESTATEMENT (SECOND) OF TORTS § 929(1)(a) (1979)).

The circumstances presented in *Moser* make the cost of repair or replacement test, and the restoration test inapplicable. It was estimated that restoration of the land to its former condition would take fifty years and require that the land be removed from cultivation.[83] In addition, it is conceivable that because of the extended period of time required to restore the land to its former condition the injury to the land could be characterized as permanent.[84] This characterization would mandate the application of the diminution in value rule: however, the inflation in the value of the land would preclude compensation under this rule. These factors, present in *Moser*, provide a clear situation in which the general damage principles do not allow for compensation sufficient to restore the injured party to the position he occupied prior to the injury. The dissenting opinion indicated that the majority's position with respect to erosion damages resulted from a rigid adherance to the general damage principles.[85] Chief Justice Reynoldson pointed out the court's authority, and the necessity, for applying these general principles to maintain flexibility.[86] The chief justice further stated that, in the situation presented in *Moser*, where the traditional rules do not provide an adequate remedy, the plaintiff should be able to measure damages by some other competent method.[87]

c. *Alternative methods of measuring damages to real property Bailment analogy*

The increase in the land's value over the time in which damages are to be calculated should not preclude proof of damages by some method other than the diminution in value test.[88] Chief Justice Reynoldson proposed a modification of the general rule as a method for measuring damages in *Moser*.[89] This alternative combines, to a degree the existing real property damage rules with some elements of the damage rules applied in bailment situations. The bailment rule allows damages to goods to be measured by the difference between the market value of the goods in their damaged condition and the market value of a like kind or quality in an undamaged condition.[90] The chief justice contended that this modification would allow the plaintiff to establish that, upon taking possession of the land, it was worth less in the eroded condition than it would have been worth in an unexploited condition.[91] The difference between these values, under the chief justice's

83. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 904 (Iowa 1981).
84. *See supra* note 71.
85. *See* Moser v. Thorp Sales Corp., 312 N.W.2d 881, 906 (Iowa 1981).
86. *Id.* at 905.
87. *Id.* (citing Harvey v. Mason City & Ft. D. R.R. Co., 129 Iowa 465, 479-80, 105 N.W. 958, 963 (1906).
88. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 906 (Iowa 1981).
89. *Id.* at 906.
90. *Id.* (citing Halferty v. Hawkeye Dodge, Inc., 158 N.W.2d 750,753 (Iowa 1968) (damage to an automobile); Jones v. O'Bryon, 254 Iowa 31, 38, 116 N.W.2d 461, 465 (1962) (damage to an airplane)).
91. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 906 (Iowa 1981). The damages could be

approach, would constitute the measure of damages.[92]

Such an approach would avoid the hardships and difficulties occasioned by rigid application of the before-and-after market-value test in circumstances in which the damages occurred over a long period of time. It would also factor out the effects of inflation and deflation.

Damages based on the cost of implementing conservation practices

Another approach to providing compensation to the injured party for erosion damages involves consideration of the cost of implementing conservation practices. A recent Florida case presented a situation parallel to *Moser* in that the value of the plaintiff's property after the defendant's act was higher than before.[93] The "before and after" damage rule would not compensate the injured landowner in *Gasparilla* thus, the court awarded damages measured by the cost of erecting erosion-preventing devices.[94] The *Gasparilla* court did not consider this award as damages, instead it viewed the award as an alternative vehicle for accomplishing what might have been obtained by a court-supervised injunction.[95] The *Moser* court might have considered this approach. Since the erosion damage in *Moser* could not be restored simply by hauling in fill, an appropriate remedy would be an award of damages equal to the cost of implementing more expensive but also more effective conservation practices, such as terracing and strip cropping.[96] This approach would prospectively offset the effects of erosion thereby facilitating the natural restoration of the soil.

Damages measured by diminished productive capacity

The plaintiff in *Moser* attempted to prove the dollar amount of the damages suffered from erosion by capitalizing on a per-acre basis the decrease in the productive value of the land.[97] The basis of the plaintiff's calculation was the reduction in the "corn suitability rating" caused by the erosion.[98] By this calculation, the plaintiff's expert testified that the per-acre

established by expert testimony, testimony of the landowner, or other local farmers. *Id.* (citing Holcomb v. Hoffschneider, 297 N.W.2d 210, 213 (Iowa 1980).

92. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 906 (Iowa 1981).

93. Gasparilla Inn, Inc. v. Sunset Realty Corp., 358 So. 2d 234 (Fla. Dist. Ct. App. 1978) (erosion damages caused by the defendant's construction of a boat canal adjacent to the plaintiff's golf course resulted in increased value of plaintiff's property).

94. *Id.* at 237.

95. *Id.*

96. Land damaged by erosion cannot be restored by hauling in new soil to replace the soil lost; it must be restored by natural processes. Moser v. Thorp Sales Corp., 312 N.W.2d 881,906 (Iowa 1981). Terraces are ridges and channels across a slope at suitable spaces which slow the force of water running off the slope and mechanically diverts runoff from a field into a safe outlet. A terrace will also break a long slope into a short slope therefore preventing the accumulation of water. K. BERGER, *supra* note 38, at 355. Strip cropping refers to the practice of growing crops in a systematic arrangement of strips or bands across the general slope or at an angle to offset the adverse effects of prevailing winds. The strips of meadow or grass between the cultivated soil traps water which prevents water erosion to the exposed soil. *Id.* at 354.

97. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 906 (Iowa 1981).

98. *Id.*

decrease in value was $62.42.[99]

Precedent does exist, however, for calculating permanent damages to land by measuring its diminished capacity for certain purposes. For example, the Wyoming Supreme Court in *Wheatland Irrigation District v. McGuire* sustained the trial court's calculation of permanent land damages based upon the diminished capacity of the land to support cattle.[100] The plaintiff's expert offered proof which indicated that, before the damage, the land had a carrying capacity of 1000 animal units; after the damage, the carrying capacity was reduced to approximately 850 animal units.[101] This method of damage appraisal requires the assignment of a value to each unit lost, thereby fixing the amount of damages. This represents a plausible approach so long as a proper foundation can be laid to support both before-and-after capacity estimates and so long as the value assigned to the units lost is not speculative or conjectural.

The dissenting opinion in *Moser*, supported by three justices, would have allowed the plaintiff to recover damages based on the $62.42 per-acre calculation determined by the diminution in the productive value of the land.[102] The dissent also held that, at a minimum, the plaintiff should have been awarded nominal damages.[103]

CONCLUSION

The decision in *Moser* recognized the legal responsibility of a farmer who cultivates land owned by someone else for the damage resulting from their unreasonable farming practices. This recognition does not represent a new source of liability since this liability already existed, either in the common law or by statute. The decision, however, reflects an attempt by the Iowa Supreme Court to provide a rational basis for defining the extent of this liability. By the use of soil-loss limitations sensitive to local conditions and circumstances, courts have found a basis upon which to measure the reasonableness of farming practices employed on a particular farm. The South Dakota Supreme Court could also avail itself of the soil-loss limitations standard when faced with facts similar to those in *Moser*.

The measurement of damages for injury to the land as a result of erosion presents certain difficulties. This is not to say, however, that alternatives to the general rules typically applied to land injury cases do not exist.

99. *Id.* Chief Justice Reynoldson in his dissenting opinion concluded that the trial court's rejection of this estimate was based on the defendant's objection that it was speculation, and that a proper foundation was not laid for the expert's testimony. *Id.*

100. Wheatland Irig. Dist. v. McGuire, 562 P.2d 287 (Wyo. 1977) (involved the breaking of an irrigation dam resulting permanent injury to the land).

101. *Id.* at 295. The defendant's expert did not controvert the *method* of measurement, only the values assigned; he offered a lower damage estimate. The jury accepted the lower estimate which was affirmed by the supreme court. *Id.* at 296.

102. Moser v. Thorp Sales Corp., 312 N.W.2d 881, 907 (Iowa 1981). The chief justice stated that he would accept such a calculation despite their "somewhat obscure and speculative character." *Id.*

103. *Id.*

The damage options discussed in this note represent suitable alternatives to the general rules. The Iowa Supreme Court stopped short of awarding damages for the erosion that resulted from bad farming practices; it did, however, open the door for landowners to protect their farms from poor farming practices used by their tenants or adverse occupants. The damage options discussed here would apply equally to South Dakota, since the South Dakota Supreme Court has adopted the general damage rules and has held that they are to be applied flexibly.[104]

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104. Ward v. LaCreek Elec. Ass'n., 83 S.D. 584, 163 N.W.2d 344 (1968).