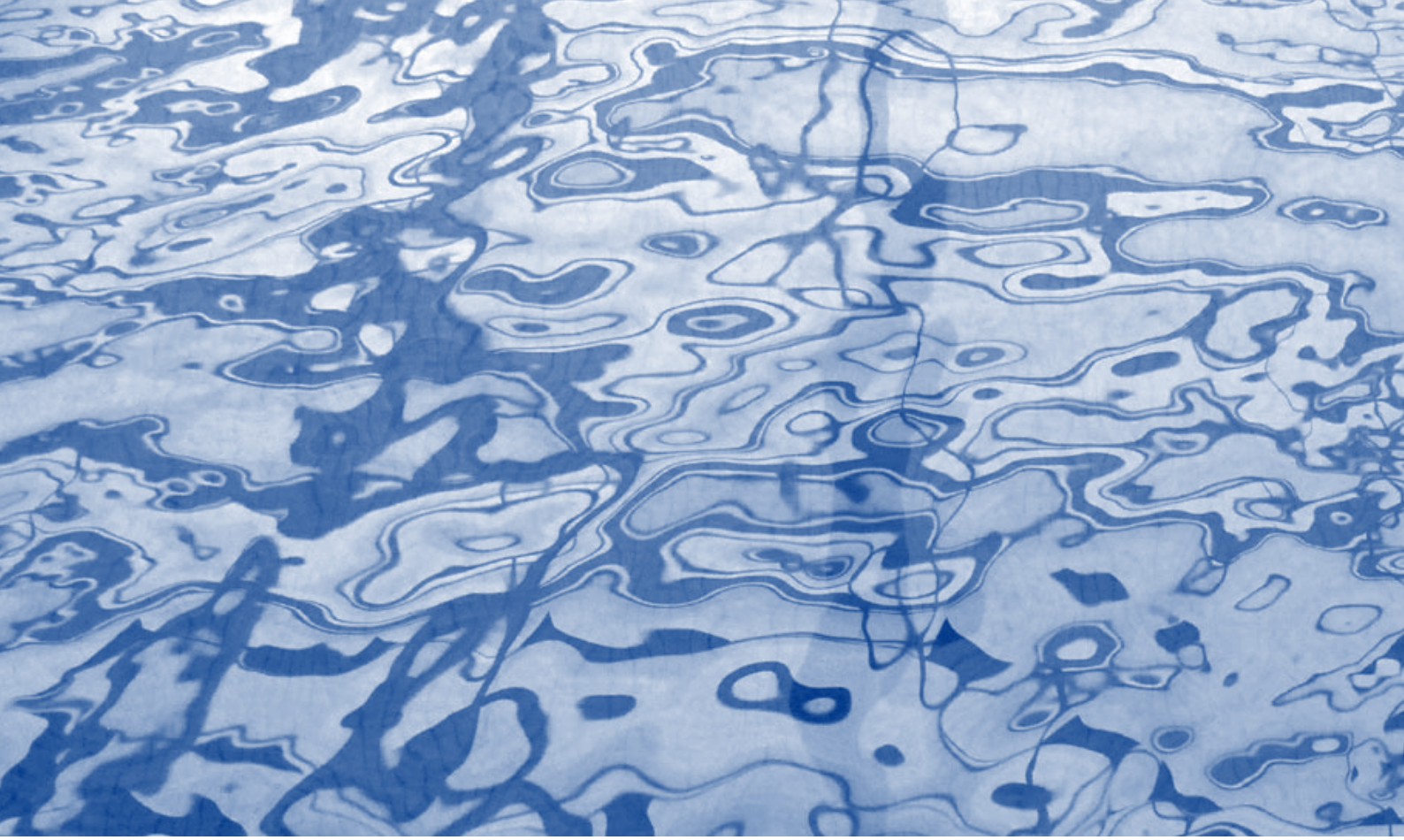
Sharing the fish - whose fish?

Sharing the fish - whose fish?



Sharing the fish - whose fish?

Sharing the fish - whose fish?

Bernard P. Walrut, bwalrut@bpwc.biz

Table of contents

Abstract v
Introduction 1
Fishing 3

Abstract

The right to fish is regarded in many jurisdictions as a common right unless restrained by statute. However, fish that have escaped from aquaculture and the possibility of patented transgenic fish may now affect that right.

In much of the world, animals are divided into two classes, those absolutely owned (*domitae naturae*) and those the subject of a qualified property right *(ferae naturae*). Fish have long been regarded as *ferae naturae*. Fishing is the taking of ferae naturae.

A number of developments may affect this right. Some fish may now be the subject of absolute ownership. Limited property rights may subsist in others, even at large. Accordingly, aquaculturists may retain property in some fish at large.

The criminal law in some jurisdictions has added another dimension. An animal commonly kept in captivity or tamed is the property of the possessor. If it escapes and another person takes and keeps that animal, knowing that the identity or whereabouts of the owner can be discovered by reasonable enquiry, that person commits an offence.

The advent of patented transgenic fish adds a further dimension. Generally, patent laws grant the owner of the patent the exclusive right to use, sell or dispose of a product. This may include a patented animal or an animal with a patented gene. Accordingly, the rights of the patent holder, in some jurisdictions, may prevent a fisher dealing in captured fish.

Notwithstanding an allocation, not everything a fisher takes will necessarily be the fisher's to keep or sell.

Introduction

The right to fish is regarded in many jurisdictions as a common right unless restrained by statute. In much of the world, animals are divided into two classes, those absolutely owned (*domitae naturae*) and those the subject of a qualified property right (*ferae naturae*). Fish have long been regarded as *ferae naturae*. Fishing is the taking of *ferae naturae*.

A number of developments may affect this right to fish, though it is the combination of two factors that has the potential to impact significantly on the right to fish. The first is the advent of aquaculture of marine species and more importantly their escape. The second element involves one or more of the legal implications of the changing nature of humans' relationship with some populations of fish, the changing criminal law, the advent of biotechnology and the availability of patents for such animals.

FISHING[1]

Brief introduction

The regulation of access to fisheries in tidal waters of England has a very long history clearly pre-dating the Magna Carta. The nature and extent of such rights and how they arose is unknown, but they are most likely attributable to ownership or dominion of the soil over which they flow.[2] One suggestion is that prior to the Norman Conquest, except possibly in respect of royal fish, no franchise existed, whether in tidal or non-tidal waters.[3] It was with the Norman Conquest that the idea was brought to England that the right to fish in tidal waters was part of the prerogatives.

One view is that Magna Carta expressly curtailed that right, though little in the Magna Carta can be found to support that view.[4] The modern judicial view, since *Malcolmson v O'Dea*,[5] is that the privileges of the Crown were curtailed by the Magna Carta, and thereafter subject to legislative restriction and restricted to some privileged areas. The public right to fish was thereafter recognised as exercisable by every subject as of common right.[6]

1 See Walrut (2003). The public rights to use the sea and rivers. *Environmental and Planning Law Journal* 20:423-444. That article contains a discussion of the right to fish and other rights to use the sea in Australia.
2 Attorney-General for British Columbia v Attorney-General for Canada [1914] AC 153. Also see Moore, S.A. & Moore, H.S. 1903. *The history and law of fisheries*. Stevens and Haynes; Fulton. T.W. 1911. *The sovereignty of the sea: an historical account of the claims of England to the dominion of the British seas, and of the evolution of the territorial waters: with special reference to the rights of the fishing and the naval salute*. W. Blackwood; and Fenn, P.T. 1926. *The origin of the right of fishery in territorial waters*. Harvard University Press.
3 It is likely that the right to fish was regarded as open to all, much like the Roman law, Digest of Justinian, 41,1,1-5.
4 See Moore and Moore, n 2, Fenn, n 2 and Walrut, n 1 for a more general discussion.
5 (1863) 10 HL 593, 11 ER 1155.
6 Malcolmson v O'Dea (1863) 10 HL 593, 11 ER 1155; Neill v Duke of Devonshire (1882) 8 AC 179; Attorney-General for British Columbia v Attorney-General for Canada [1914] AC 153; Harper v Minister for Sea Fisheries (1989) 168 CLR 314; Yarmirr v Commonwealth (1999) 168 ALR 426 (on appeal to the High Court (2001) 184 ALR 113).

This principle has been applied in Australia and extends to fisheries of a tidal river to the extent that it is navigable[7] and the territorial sea of the Commonwealth.[8]

Nature of fishing

Fishing at common law is the capture or taking of a *res nullius*. It is the occupancy to the exclusion of others of *ferae naturae*,[9] in this respect, subject to custom; it follows the Roman law relating to the capture of *ferae naturae*. The difference is the medium in which it takes place and the manner required by that medium.

Many legislative schemes relating to fisheries and fishing have their own definition of fishing and in many cases it depends on the taking of fish, if indeed it means anything different,[10] though sometimes they have their own definition of "taking". The definitions may not be concerned with the status of the animal taken, namely whether it is *ferae naturae* or *domitae naturae*: they may emphasise an activity.

Modified right to fish

The common law right has been modified in each of the states and territories of Australia to varying degrees.[11] In each case the effect of the statute is a matter of interpretation and construction. In many cases the right to fish now arises by reason of the statute rather than regulation of the common law right.

Whether the public right to fish at common law is being regulated or has been abrogated by fisheries legislation and replaced by a statutory right to fish must be determined by an examination of the legislation. The abrogation may be more limited and merely in respect of a particular type or population of fish.[12]

7 The Case of the Royal Piscary of Banne (1611) Davies 55, 80 ER 540; Carter v Murcot (1768) 4 Burr 2162, 98 ER 127; Attorney-General for British Columbia v Attorney-General for Canada [1914] AC 153; Harper v Minister for Sea Fisheries (1989) 168 CLR 314. In Canada and possibly in Australia it extends to non-tidal navigable rivers as discussed in Walrut, n 1.

8 Minister for Primary Industry and Energy v Davey (1993) 119 ALR 108.

9 Foster v Warblington Urban Council [1906] 1 KB 648.

10 See St Ledger v Bailey [1962] Tas SR 131; Ex parte Tobias (1884) 6 Alt 10; Ministry of Agriculture and Fisheries v Prangley [1994] 1 NZLR 416.

11 For a discussion of the various statutes affecting the right to fish in the states and territories, see DE Fisher. *Laws of Australia*. Primary Production, Vol 14.11, Ch 5.

12 See Olney J, Yarmirr v Northern Territory (No 2) (1998) 82 FCR 533 and Mansfield J, Arnhemland Aboriginal Land Trust v Director of Fisheries (Northern Territory) (2000) 170 ALR 1 (on appeal to the Full Federal Court (2002) 185 ALR 649).

DIVISION OF ANIMALS

Introduction

The English common law has two basic divisions of animals, following the Roman law: *domitae naturae* and *ferae naturae*. *Domitae naturae* consist of a number of populations of animals (e.g. cattle, sheep, pigs, horses, dogs and cats). The division *ferae naturae* encompasses all other animals, with a possible exception for those without the power of locomotion.

Domitae naturae

As a class *domitae naturae* are generally tame and capable of living about humans. They are populations recognised and recognisable by the community and in the common law, based on acceptance and identification in the community. They are populations of animals useful to humans, they are identifiable as a population, and they are populations over which humans effect a level of subjugation or control.[13]

The common law has also emphasised the population rather than the species. The expression "species" when used in this context means a population of animals recognised by the community as having certain recognised or distinguishing attributes in that community. It does not mean one designated as such by modern scientific or taxonomical classification, notwithstanding some recent attempts to adopt the scientific sense.[14]

Ferae naturae

The division *ferae naturae* has a number of subdivisions in the law, according to the circumstances under which they are possessed. The first of those subdivisions is those animals *per industriam*, the subject of the art and industry of humans. In recognition of the efforts of humans, predominantly in an agricultural context, the proprietors of animals in this situation had a property interest nearly as large as that afforded to the proprietors of *domitae naturae*.

The second subdivision is those animals that are the subject of certain royal franchises known as the forest, the chase, the park and the warren.[15]
The third subdivision recognised an interest in the animal because of the ownership of the soil, an interest that may prevail over the rights of others to take the animal.

13 The Case of Swans (1592) 7 Co 15b, 77 ER 435. Also see Walrut, B. 2002. *Sea ranching and aspects of the common law: a proposal for a legislative framework*. PhD thesis, University of British Columbia.
14 Examples of use of species in a scientific sense are Behrens v Bertram Mills Circus Ltd [1957] 2 QB 1 and Reeve v Wardle, Ex parte Reeve, [1960] QLR. 143. Also see Walrut, n 13.
15 It is now obsolete and most likely never adopted in the English colonies. Also see Walrut, n 13.

A possible refashioned test

The common law has in any event moved on, at least outside of England, where the introduction of new animals and new practices required the modernisation of the rules, and consequently a refashioning of the test for *domitae naturae*.

This refashioning having occurred, the rules may now be described in the following terms (without adequately allowing for the concept of alien animals):[16]

Domitae naturae are:

- a group[17] of animals;
- made up of a number of populations of animals[18] (which in some cases may be regarded as a colony);
- each population being recognised in the particular community or society:[19]
- as tame, based on the attributes of the population;[20] and
- as having been accustomed for a significant time to associate with that community or society;[21] or
- having been subjected to significant or consistent exploitation by humans in a manner recognised in that community or society, other than by hunting or gathering;[22]
- the individual members of the population have a subsisting power of locomotion at the relevant time;[23] and
- the members of the population are capable of being identified as members of that population.[24]

16 Alien animals are those that do not occur naturally in a region and have not become established in the wild in that area. At large they are clearly distinguishable as alien and by implication owned. The concept was rejected in Mullet v Bradley 24 Misc NY 695 (1898).

17 A group in this context is merely a number of populations.

18 The word "population" has been adopted to avoid the problem created by the use of the word "species", as already mentioned in this paper and more fully discussed in Walrut, n 13.

19 The emphasis is on community recognition, most likely a country but in federations it may be a state or province. See Filburn v The People's Palace and Aquarium Company, Ltd (1890) 25 QBD 258; Nada Shah v Sleeman (1917) 19 WALR 119; Vedapuratti v Koppan Nair (1911) ILR 35 Mad. 708 and Maung Kyow (Maney Kyaw) v Ma Kyin (1900) 7 Bur LR 73; Madho v Akaji, (1912) 17 Ind Cas 899 (Nag) and Anon, (1851) Aust 153 (Ceylon), as noted in Williams, G.L. 1939. *Liability for animals: an account of the development and present law of tortious liability for animals, distress damage feasant and the duty to fence, in Great Britain, Northern Ireland and the Common-Law Dominions.* Cambridge University Press; McQuaker v Goddard, [1940] 1 KB 687; Stormer v Ingram [1978] 21 SASR 93; Ebers v MacEachern [1932] 3 DLR 415; Campbell v Hedley (1917) 39 OLR 528. Also see Walrut, n 13.

20 Tameness in this context is a population attribute rather than that of an individual animal.

21 Some animals have had a long association with humans that is recognised in a number of the decisions. From the 1300s they were animals that were exploited for food, draught or skins. Later this was extended to those used for companionship as discussed in Walrut, n 13.

22 This reflects the modern view, found in various decisions, including the following: Davies v Powell (1737) Will 47, 125 ER 1048; Morgan v The Earl of Abergavenny (1849) 8 CB 768; Ford v Tynte, (1861) 2 J & H 150, 70 ER 1008; Brady v Warren, [1900] 2 IR 632; EA Stephens & Co v Albers 256 P 15, 17 (1927); Ebers v MacEachern [1932] 3 DLR 415; Sprague-Dawley, Inc v Moore 155 NW 2d 579 (1968); Stormer v Ingram [1978] 21 SASR 93. This is more fully discussed in Walrut, n 13.

23 See the discussions in McKee v Gratz, 260 US 127 (1922); People v Morrison 194 NY 175, 86 NE 1120 (1909); Coos Bay Oyster Cooperative v State Highway Commission 219 Ore 588, 348 P 2d 39, 42 (1959). The power of independent locomotion appears to have been the most significant reason for establishing different rules for animate and inanimate items.

24 Dewell v Saunders (1618) 2 Roll 3, 81 ER 620; Taylor v Newman (1863) 4 B & S 89, 122 ER 393;

Ferae naturae are those individual animals with subsisting powers of locomotion that are not *domitae naturae*.[25] *Domitae naturae* are the subject of absolute ownership. *Ferae naturae* may be the subject of qualified ownership.

Status of fish

The common law has long recognised that fish in the sea or great rivers are *ferae naturae*[26] and, subject to custom and the rights in private fisheries, are owned by no-one.[27] As *ferae naturae* any proprietary interest in fish is usually lost when they regain their liberty.[28] Subject to custom and the rights in private fisheries, property in fish in the sea is not acquired until the capture is complete.[29]

Notwithstanding that status, humans have taken control of some population of fish and subjected them to much the same process as the terrestrial animals humans exploit. In some jurisdictions the criteria described in this paper for classifying animals as *domitae naturae* will be satisfied.[30] The population may be regarded as *domiatae naturae*.

CRIMINAL LAW

Introduction

In modern times we expect the state to provide a system of protection for property rights and ultimately sanctions against persons wrongfully interfering with those rights. One of the instruments by which the state provides that protection is the civil law. Another is the criminal law.

Divergence

The status of the criminal law and its reform in connection with animals was considered in a proposal for a Criminal Code for England in 1879.[31]

Commonwealth v Chace 9 Pick (Mass) 15 (1879). The ability to be able to identify the animal as a member of one population or another has been a matter of concern in the common law. It was particularly important when the civil and criminal consequences were dispensed in the one action and remains so when criminal sanctions are involved.

25 They are all other animals.

26 Grymes v Shack (1624) Cro Car 264, 79 ER 226.

27 YB (1345) 18 Edw 3, 8; Attorney-General for British Columbia v Attorney-General for Canada [1914] AC 153. No subject however was entitled to take whales or sturgeon in English waters without a special grant of the king, as they were royal fish.

28 Purcell v Minister for Finance [1939] IR 115.

29 Aberdeen Arctic Co v Sutter (1862) 4 Maq App Cas 355; Fennings v Lord Grenville (1808) 1 Taunt 241, 127 ER 825; Young v Hichens (1844) 6 QB 606, 115 ER 228; Littledale v Scaith (1788) 1 Taun 243a, 127 ER 826; Hogarth v Jackson (1827) M & M 58, 173 ER 1080; Skinner v Chapman (1827) M & M 59, 173 ER 1081.

30 For examples of this see Walrut, n 13.

31 Royal Commissioners on the Criminal Code. Report of the Royal Commission appointed to consider the law relating to indictable offences. C2345. Her Majesty's Stationer, 1879. Also see discussion in Theft of animals ferae naturae. 1883 Irish Law Times. 16: 10-11.

The report recognised that, conceptually, a wild animal should, on escaping from confinement, still be the subject of larceny, unless it is one commonly found wild in the country (it adopted aspects of Blackstone's distinction[32]).

Since then, in most common law jurisdictions, the criminal law relating to theft of animals has been altered by statute. Larceny of an animal may now be committed in circumstances where common law property rights no longer prevail. A few examples will illustrate this process.

Some legislative examples

South Australia
In South Australia the matter is dealt with in the Criminal Law Consolidation Act 1935 (SA). In this Act property is defined in section 5 to mean real or personal property whether tangible or intangible and includes a wild animal that is in captivity or ordinarily kept in captivity.[33] A further definition of property is contained in section 130 (for the specific purpose of the theft provisions) and it includes a wild creature that is tamed or ordinarily kept in captivity or is reduced (or in the course of being reduced) into someone's possession.

Section 131(1) provides that a person's conduct is dishonest if the person acts dishonestly according to the standards of ordinary people and knows that he or she is so acting. In that situation a person commits an offence in taking property. Section 131(2) however provides that a person does not act dishonestly if the person finds property, keeps or otherwise deals with it in the belief that the identity or whereabouts of the owner cannot be discovered by taking reasonable steps.

In addition section 131(5) provides that a person who acts in a particular way is not dishonest if the person honestly but mistakenly believes that he or she has a legal or equitable right to act in that way.

Western Australia
The Western Australian provision is somewhat more complicated and appears to adopt the approach of the English Royal Commissioners[34] and Blackstone.[35] The provision is in section 370 of the Criminal Code in the following terms:

Every tame animal, whether tame by nature or wild by nature and tamed, which is the property of any person, is capable of being stolen.

32 Blackstone, W. *Commentaries on the laws of England*. 1765-1769.
33 There appears to have been no attempt to alter the common law property concept to ensure consistency between the two.
34 Royal Commissioners on the Criminal Code, n 31.
35 Blackstone, n 32.

Animals wild by nature, of a kind which is not ordinarily found in a condition of natural liberty in Western Australia, which are the property of any person, and which are usually kept in a state of confinement, are capable of being stolen, whether they are actually in confinement or have escaped from confinement.

Animals wild by nature, of a kind which is ordinarily found in a condition of natural liberty in Western Australia which are the property of any person, are capable of being stolen while they are in confinement and while they are being actually pursued after escaping from confinement, but not at any other time.

An animal wild by nature is deemed to be in a state of confinement so long as it is in a den, cage, sty, tank, or other small enclosure, or is otherwise so placed that it cannot escape and that its owner can take possession of it at pleasure.

Animals, which are the property of any person, are capable of being stolen while they are being reared by aquaculture in a place that is the property of, or under the control of, any person.

The term "animal" includes any living creature and any living aquatic organism other than humans. Wild animals in the enjoyment of their natural liberty are not capable of being stolen.

The Western Australian provisions also provide that the taking of lost property is not deemed to be wrongful if at the time of the conversion the person taking or converting the property does not know who is the owner, and believes, on reasonable grounds, that the owner cannot be discovered.

England
The English Theft Act 1968 also had regard to the status of *ferae naturae*. No special provision was made for *domitae naturae*. Section 4(4) provides in respect of "wild creatures" that those "tamed or untamed, shall be regarded as property; but a person cannot steal a wild creature not tamed nor ordinarily kept in captivity unless … [it] has been reduced into possession…and possession has not been lost or abandoned ".

Under this provision, for the purposes of theft, a person who has a wild living creature in captivity shall be deemed to have a special property or interest in it whilst in captivity and after it has escaped from captivity provided it has not been lost or abandoned. No definition of a wild living creature is provided.

Some Concepts Discussed

The criminal law statutes in this area have commonly adopted the terms "tame" and "domestic". These expressions usually emphasise the attribute of the animal or group of animals, so a tame or domestic animal will include *domitae naturae* (i.e. on a population basis; on that basis it will not include feral animals) and may include a *ferae naturae*.

A domestic animal is one (not being an absolutely wild animal) which either by habit or special training lives in association with humans. It is something less than *domitae naturae*; the emphasis is on the individual animal and whether it is accustomed to live about humans rather than the habit of the population of animals.[36]

Tameness is regarded in many legal contexts as also the attribute of a particular animal rather than that of a class.[37] The facts pertaining to the particular animal are to be considered. Zoologists usually describe tameness in terms of fear reactions and individual flight distance or flight response aspects.[38]

Whilst tameness may conceptually have a simple common meaning, it also needs to be considered in the context of different classes or populations of animals. Even animals of the same breed in different contexts may exhibit different reactions. In the law, tameness, at least as between populations of animals, will involve different attributes.[39]

The concept of animals ordinarily found in captivity, in this context, appears to have been introduced by the Theft Act 1968 (UK). It appears to be the converse of the Blackstone concept.[40] The concept requires the court to consider the status of the population of animals in the jurisdiction. It would appear that the court must reach a conclusion on the evidence available,[41] on each occasion, as to the status of the population of animals in the particular jurisdiction. The courts are no longer concerned whether the animals are *domitae naturae* or *ferae naturae*. It is irrelevant that there are wild populations.[42] If there are sufficient numbers found in captivity in the jurisdiction then this requirement would appear to be satisfied.

36 Attorney-General (S.A.) v Bray (1964) 111 CLR 402, 425; Commonwealth v Proctor 355 Mass 504, 505, 246 NE 2d 454, 455 (1969).
37 This is to be compared with the concepts of *domitae naturae* and *ferae naturae.*
38 Grandin, T. & Deesing, M.J. 1998. Genetics and behaviour during handling restraint and herding. Pp 113-144. In: T Grandin (ed.) *Genetics and the behavior of domestic animals*. Academic Press.
39 YB (1521) 12 Hen 8, 9; Wadhurst v Damme (1604) Cro Jac 45, 79 ER 37; Gedge v Minne (1614) 2 Bulst 60, 80 ER 958; Mitten v Fawdrey (1624) Pop 161, 79 ER 1259; Gundry v Feltham (1786) 1 TR 334, 99 ER 1125; Earl of Essex v Capel (1809) 2 Chitty 1381; Paul v Summerhayes (1878) 4 QBD 9; also see Livingston, J. (dissenting) in Pierson v Post 3 Cai NY 175 (1805).
40 Blackstone, n 32.
41 It is not clear whether evidence must be adduced or whether the court will take judicial notice.
42 Compare with Blackstone's requirement that the animal not be found ordinarily at large.

TRANSGENIC ANIMALS

Introduction[43]

A patent is a grant within a defined territory of the exclusive right to exploit the patented matter for a fixed period. In Australia the period is twenty years for a standard patent. The right conferred is the right to exploit the invention and to authorise others to exploit the invention.[44]

The right to exploit in the Australian context is defined to include:[45]

a) where the invention is a product—make, hire, sell or otherwise dispose of the product, offer to make, sell, hire or otherwise dispose of it, use or import it, or keep it for the purpose of doing any of those things; or
b) where the invention is a method or process—use the method or process or do any act mentioned in paragraph (a) in respect of a product resulting from such use.

The view is that possession, even technical possession of a patented item, coupled with a present intention to trade, amounts to infringement.[46] The unauthorised commercial use of a patented product will be an infringement. It is not clear whether non-commercial uses constitute an infringement, though generally it would appear not.[47]

Where an animal may be the subject of a patent the normal rules of ownership of animals will usually be subordinated to the rights of the patent holder, insofar as one seeks to exploit that animal by sale or disposal or it is kept for that purpose.

Transgenic Fish

The general view is that of the various farmed animals for which transgenic populations exist, fish are amongst the ones that are best predisposed to survival, dispersal and reproduction in the wild.[48] The dispersal capacity when assessed against the criteria of ability to become feral, the likelihood of escape and mobility are all high.[49]

---

43 See Conroy, K. 2004. Riding on a Geep's back: preparing Australian patent law for a domestic industry sourced in the transgenic animal. *University of New England* Law Journal 2.
44 Sections 13 and 67 of the Patents Act 1990 (Cth).
45 Ibid.
46 Morton-Norwich Products Inc v Intercen Ltd [1978] RPC 501; also see discussion in McKeogh, J. Stewart, A. & Griffith, P. 2004. *Intellectual property in Australia*. 3rd ed, para 14.5.
47 McKeogh, Stewart and Griffith, n 46, para 14.6.
48 TJ Benfey. *Environmental impacts of genetically modified animals, safety assessment of foods from genetically modified animals including fish*. One of a series of six working papers, as well as the final report, from a FAO/WHO Expert Consultation held on 17-21 November 2003 in Rome, Italy. Available at ftp://ftp.fao.org/es/esn/food/GMtopic5.pdf.
49 Findinier, I. 2003. *Animal biotechnologies: state of the art, risks and perspectives*, FAO. General background document for an FAO/WHO Expert Consultation on Safety Assessment of Foods Derived from Genetically

One report in 2003 suggested nineteen species of finfish had been the subject of reported genetic modification. The areas of interest included growth enhancement, altered temperature tolerance, management of viral diseases, altered respiratory and swimming performance, and disease resistance.[50]

Innocent infringement

The problem of innocent infringement is well highlighted by the Canadian case of Monsanto Canada Inc v Schmeiser.[51] Monsanto had a patent for glyphosate resistant canola plants which it marketed as RoundupReady Canola. Monsanto licensed farmers to plant RoundupReady Canola. Glyphosate resistant canola plants were found to be growing on Schmeiser's farm and Monsanto proceeded against him for infringement of its patent. Schmeiser put forward three grounds why he should not be liable. He had not deliberately planted the canola; he gained no benefit from growing it; and Monsanto had put itself in a position where it's patent could be innocently infringed.[52]

Schmeiser failed. The view was that knowledge or intention is irrelevant to the fact of infringement. In essence where a patented invention is used without permission, the patent holder's rights will be infringed.[53]

The decision highlights the problems associated with passive infringement of biological inventions. Two factors combine to create the problem.[54] The first is that patent infringement occurs irrespective of the intention of the fisher. All that is necessary is that the fisher does something that interferes with the rights granted under the patent. The second factor is that the patent is of a biological invention, one that can replicate itself naturally with no further human intervention. It is further exacerbated by the fact that it is difficult to determine whether the fish taken infringes a patent. They cannot be readily distinguished from fish without the infringing gene.

In the main the recreational fisher should not encounter a difficulty provided the recreational fisher does not sell or otherwise dispose of the fish the subject of the patent. A commercial fisher will infringe the patent by simply having the fish in the possession of the fisher; the fisher will be presumed to have them in possession for the purpose of sale or disposal.

Section 123(1) of the Patents Act 1990 (Cth) provides some possible relief for infringement. The effect of subsection (1) is to give the court the

Modified Animals including Fish. Available at ftp://ftp.fao.org/es/esn/food/GenBiotech_en.pdf.

50 Beardmore, J.A. & Porter, J.S. 2003. *Genetically modified organisms and aquaculture*. FAO Fisheries Circular No 989, FAO, Rome.

51 [2004] SCC 34; [2004] 1 SCR 902; (2004), 239 DLR (4th) 271.

52 See Sherman, B. 2003. Biological inventions and the problem of passive infringement. 13 *Australian Intellectual Property Journal* 146 and Conroy, n 43.

53 See Conroy, n 43.

54 Ibid.

discretion as to whether or not to award damages against a defendant found to have infringed the patent who was not aware or had no reason to believe that a patent for the item existed. It is for the patent infringer to satisfy the court of both matters.

CONCLUSION

Fishers should no longer assume that they are entitled to take and keep or sell everything they catch, even pursuant to a fishing allocation. A combination of two developments has significantly altered these rights, in what until very recently, has been a very traditional hunter gatherer environment.

The first is the advent of aquaculture of marine species and more importantly their escape.[55] The second is the developments occurring in a number of different fields, the changing nature of humans' relationship with some populations of fish, the changing criminal law and the availability of patents for animals produced by biotechnology.

55 Whilst the emphasis in this paper has been on escapes, sea ranching of fish that satisfy the foregoing requirements will also give rise to similar problems for the fisher.