

THE LAWS RELATING TO BIODIVERSITY IN SINGAPORE



Melissa B. N. Tan and Hugh T. W. Tan

Raffles Museum of Biodiversity Research
National University of Singapore
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Cover photograph of a pair of endangered Lear's Macaws (*Anodorhynchus leari*) in flight. © Andy & Gill Swash. This spectacularly beautiful species is listed under Appendix I of the Convention on International Trade in Endangered Species. In 1996, a pair of Lear's Macaws was seized from the home of a Singaporean man who had kept the birds without acquiring the proper permits. The birds were subsequently returned to their home country of Brazil.

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INTRODUCTION

The term “biological diversity” (truncated as “biodiversity”) is typically understood as referring to the variety of living organisms and ecosystems.¹ In this book, the term is used with reference to how living organisms are treated and protected under Singapore law. Accordingly, the scope of

¹ The Convention on Biological Diversity defines “biological diversity” as “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems”. Secretariat of the Convention on Biological Diversity, undated. *Convention on Biological Diversity. Article 2. Use of Terms*. Secretariat of the Convention on Biological Diversity (CBD Secretariat), Montreal. <<http://www.cbd.int/convention/articles/default.shtml?a=cbd-02>>.

topics discussed are wide-ranging and include laws on animal abuse, importation and exportation of internationally endangered species, prohibited plants, vermin control, use of animals in scientific experiments, treatment of animals involved in road accidents and protection of fauna and flora in the nature reserves and national parks.

Singapore laws that relate to biodiversity are accessible at [Singapore Statutes Online](#) and the websites of various government agencies. However, these laws are scattered across several statutes and subsidiary legislation, making it quite inconvenient for anyone to determine which ones apply to everyday activities. By consolidating Singapore laws which relate to biodiversity, this book also seeks to contribute to the existing literature which has been focused on issues of nature conservation and environmental management.

The 1st section gives a brief overview of the Singapore legal system. The 2nd section is a short history of Singapore laws pertaining to plants and animals. The 3rd and 4th sections deal with general laws on animals and plants, respectively. Within each section, the various sub-sections discuss topical issues in detail. Finally, the 5th section presents the law relating to nature reserves, national parks, and other demarcated areas of Singapore.

THE SINGAPORE LEGAL SYSTEM²

The Constitution. — The *Constitution of the Republic of Singapore*³ [Constitution] is the supreme law of Singapore, meaning laws which are contrary to its provisions are void to the extent of inconsistency.⁴ The *Constitution* provides certain fundamental rights and liberties to citizens and residents of Singapore. It does not provide for the protection of biodiversity, the natural environment, or natural resources.

Legal framework. — The *Constitution* establishes a governmental framework comprising three organs of state, namely the Legislature, the Executive, and the Judiciary (Fig. 3.1).

The Legislature is the principal law-making branch of the government. It comprises the President and the unicameral Parliament that consists of elected Members of Parliament as well as two types of non-elected Members of Parliament, namely the Nominated Members of Parliament (NMPs) and Non-Constituency Members of Parliament (NCMPs). The NCMP scheme ensures a minimum level of oppositional representation⁵ whereas the NMP scheme selects individuals of distinguished public service or persons who brought honour to Singapore or who have been outstanding in “arts and letters, culture, the sciences, business, industry, the professions, social or community service or the labour movement”.⁶ The latter scheme was introduced to provide a non-partisan avenue for

² For a detailed introduction to the Singapore legal system, useful references include (1) Kevin Y.L. Tan, *The Singapore Legal System*, 2d ed. (reprint) (Singapore: Singapore University Press, 2003); (2) Singapore Academy of Law, *Welcome to Singapore Law*, online: Singapore Academy of Law <<http://www.singaporelaw.sg/>>; and (3) Eugene Tan & Gary Chan, *The Singapore Legal System*, online: Singapore Academy of Law <<http://www.singaporelaw.sg/content/LegalSyst1.html>>.

³ 1999 Rev. Ed. Sing [Constitution].

⁴ Ibid., Article 4.

⁵ Ibid, Article 39(1)(b).

⁶ Ibid., Fourth Schedule.

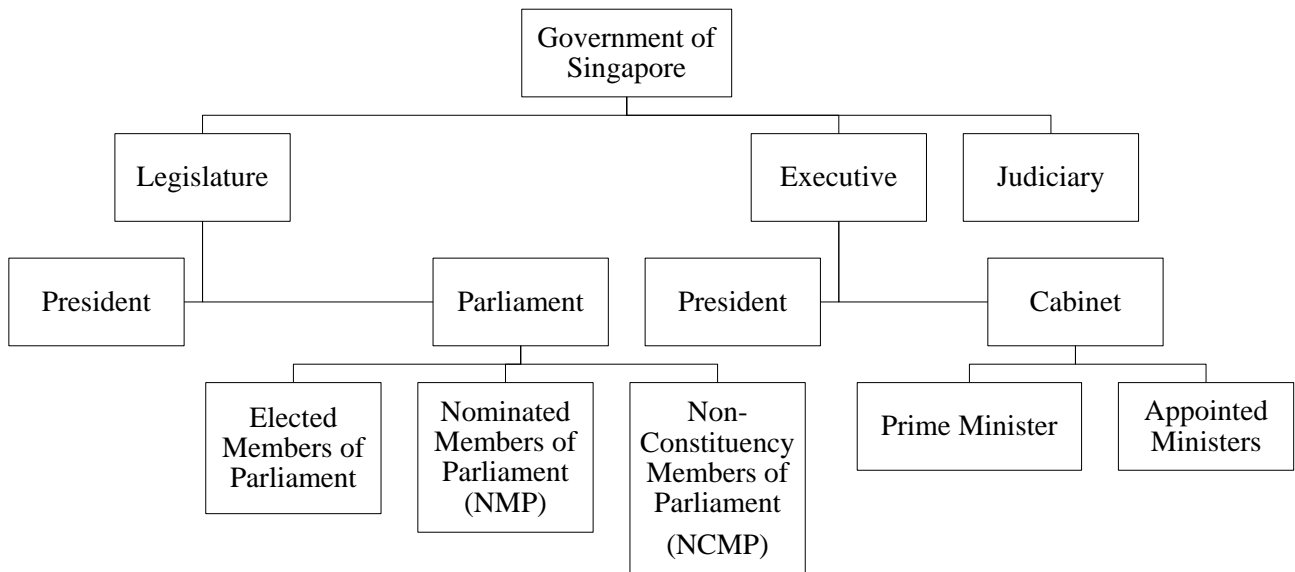


Fig. 3.1. Basic framework of the Government of Singapore.

Singaporeans to contribute to law-making.⁷ Under this scheme, environmental issues have been raised in Parliament by Geh Min and Edwin Khew and currently by Faizah Jamal.

The Executive consists of the President and the Cabinet.⁸ The Cabinet is led by the Prime Minister and is accountable to the Parliament for the general direction of government policies and the day-to-day running of governmental affairs.⁹ The Executive is responsible for “execut[ing] or administer[ing] the laws made by the [L]egislature” and this includes enacting rules and regulations when it is authorised by statute to give effect to the laws.¹⁰ The Agri-food and Veterinary Services (AVA) and National Parks Board (NParks) are under the purview of the Ministry of National Development. The National Environment Agency (NEA) and the Public Utilities Board (PUB) are under the charge of the Ministry of the Environment and Water Resources.

The Judiciary is responsible for the independent administration of justice. It has the power to decide criminal cases as well as civil cases (broadly, non-criminal disputes between members of society over their rights and obligations). As Singapore inherited the English common law system, judges apply the law from binding case precedents and make law when they decide on questions of law which come before them.

Sources of law. — At the outset, it is important to distinguish between “hard” law and “soft” law. “Hard” law refers to laws which are legally binding, meaning they can be enforced by a court order. They exist in the form of common law and national laws. Common law is the law made and developed over time by judges as they decided on each case that appears before them. Since

⁷ Sing., *Parliamentary Debates*, vol. 52, col. 14 at 15 (9 Jan.1989) (Mr Wee Kim Wee).

⁸ *Constitution*, supra note 3, Article 23(1).

⁹ The Singapore Cabinet Office, *Homepage*, online: The Singapore Cabinet Office <<http://www.cabinet.gov.sg>>.

¹⁰ Robert C. Beckman, Brady S. Coleman & Joel Lee, *Case Analysis and Statutory Interpretation—Cases and Materials*, 2d ed. (Singapore: Faculty of Law, National University of Singapore, 2001) at 3.

Singapore inherited the English common law as it stood on 27 Nov. 1826 via the *Second Charter of Justice*. Singapore common law is bound by judge-made English case law up to that date. With respect to English case law thereafter, the Singapore Parliament has passed a number of Acts of Parliament to clarify and reduce the application of English common law in Singapore.¹¹ Common law is contained in court judgments and may be accessed in reports of court judgments. It should be noted that common law is comparatively less significant in the context of laws pertaining to biodiversity.

National laws refer to Acts of Parliament and subsidiary legislation. An Act of Parliament is more commonly referred to as an Act or statute. The [Singapore Statutes Online](#) is a consolidation of all of Singapore's existing Acts of Parliament. Each Act is first drafted as a Bill which must undergo three readings in Parliament and must obtain a simple majority of votes among Members of Parliament and the President's assent before it is passed as an Act of Parliament.¹² This book makes references to speeches¹³ made during the Second Reading when the Member of Parliament in-charge¹⁴ of the Bill debates with other Members of Parliament and clarifies the scope and object behind particular statutory provisions in a Bill.

Subsidiary legislation is defined as "any order in council, proclamation, rule, regulation, order, notification, by-law or other instrument made under any Act, Ordinance or other lawful authority and having legislative effect".¹⁵ It is usually made by Ministers or the relevant authority which is authorised under the Acts to make rules and regulations or other instruments necessary to implement an Act. Being a form of delegated legislation, no subsidiary legislation shall be inconsistent with the provisions of any Act.¹⁶ It must be published in the Government Gazette.¹⁷ Subsidiary legislation is accessible via [Singapore Statutes Online](#). Alternatively, members of the public can access recently published subsidiary legislation via the [Electronic Gazette](#), the respective government agencies' websites or physical copies of the Government Gazette in the Lee Kong Chian Reference Library.

Unlike "hard" laws, "soft" laws refer to recommendations, guidelines, plans and directives "which have no binding legal force but which may be considered as steps towards the law-making process".¹⁸ Examples of "soft" laws include the Singapore Green Plan 2012, Master Urban Plan and the Cities Biodiversity Index. It should be noted that for the purposes of this book, the focus shall be on the "hard" laws.

Prosecutorial discretion and composition of offences. — Not every act or omission that may amount to an offence will be prosecuted. The Attorney-General has the discretionary power to

¹¹ E.g., *Application of English Law Act* (Cap. 7A, 1994 Rev. Ed. Sing.).

¹² *Constitution*, supra note 3, Articles 57 and 58.

¹³ Parliamentary speeches, Select Committee reports, Bills, sitting notices and the Order Papers (agenda for Parliamentary sittings) are available on the Singapore Parliament website at <http://www.parliament.gov.sg/publications/votes-and-proceedings>.

¹⁴ This includes non-elected members of Parliament. Walter Woon moved the Maintenance of Parents Bill during his term as NMP.

¹⁵ *Interpretation Act* (Cap. 1, 2002 Rev. Ed. Sing.), section 2(1).

¹⁶ *Ibid.*, section 19.

¹⁷ *Ibid.*, section 23(1)(a).

¹⁸ Koh Kheng Lian, "The Garden City and Beyond: The Legal Framework" in Ooi Giok Ling, ed., *Environment and the City—Sharing Singapore's Experience and Future Challenges* (Singapore: Times Academic Press, 1995) at 150.

institute, conduct or discontinue proceedings for any offence.¹⁹ Under section 11(1) of the *Criminal Procedure Code 2010* [CPC 2010]²⁰, the Attorney-General is also the Public Prosecutor, hence the term “prosecutorial discretion”.

Certain offences may also be set aside by composition²¹ which refers to settling an offence between the alleged victim and the accused without proceeding to prosecution in court.²² These offences may be compounded by the person specified in the fourth column of the Fourth Schedule of *CPC 2010*,²³ but once investigations have commenced or the accused has been charged in court, the offence may only be compounded with the consent of the Public Prosecutor.²⁴ Under section 242, composition may be done by collecting from the accused a sum of money not exceeding half the amount of the maximum fine prescribed for the offence in question or \$5,000 (whichever is lower). For offences other than the ones in the *Penal Code*,²⁵ the person authorised under those provisions to compound offences shall do so “subject to any general or special directions of the Public Prosecutor”.²⁶ If there is no provision for composition even though there is a compoundable offence, the offence can be compounded for up to half the maximum fine or \$2,000 (whichever is lower).²⁷ Once the sum of money has been collected, “no further proceedings shall be taken against the person in respect of such offence”.²⁸

LEGAL HISTORY

Animals at common law. — Prior to the enactment of local statutory laws, English common law was applied. At common law, different rights and liabilities were attached to a “domestic” or “wild” animal. Although this classification depended on whether an individual possessed property rights in an animal and was thus liable for its behaviour, there was no definitive basis for determining whether an animal was “domestic” or “wild”.

Generally, animals which were “by habit or training live with or in the service of man” were typically considered “domestic” animals.²⁹ Such “domestic animals” were considered a special kind of personal property (chattel)³⁰ so an individual who intentionally touches another person’s cow

¹⁹ *Constitution*, supra note 3, Article 35(8).

²⁰ No. 15 of 2010, Sing. [CPC 2010].

²¹ *Ibid.*, section 241.

²² Stanley Yeo, Neil Morgan & Chan Wing Cheong, *Criminal Law in Malaysia and Singapore* (Singapore: LexisNexis, 2007) at para. 2.14.

²³ *CPC 2010*, supra note 20, section 241(1).

²⁴ *Ibid.*, section 241(2).

²⁵ Cap. 224, 2008 Rev. Ed. Sing.

²⁶ *CPC 2010*, supra note 20, section 243(1).

²⁷ *Ibid.*, sections 243(2) and 243(3).

²⁸ *Ibid.*, sections 242(3) and 243(5).

²⁹ Lye Lin Heng, “Wildlife Protection Laws in Singapore” (1991) Sing. J.L.S. 287 [Lye, “Wildlife Protection Laws”] at 290.

³⁰ A chattel is defined as “any property other than freehold land”: *Osborn’s Concise Law Dictionary*, 10th ed., s.v. “chattel”. A freehold means “permanent and absolute tenure of land or property with freedom to dispose of it at will”: *The New Oxford Dictionary of English*, 1998, s.v. “freehold”. *Farmer v. Hunt* (1610), 1 Brownl & Golds 220; 123 ER 766.

becomes liable for trespass of chattel. In contrast, no one could possess property rights to “wild” animals, unless the animal was killed on his land.³¹ Thus, a landowner had the right to fish within the overlying waters of his property but he only had a ‘qualified property’ in the fish found there.³² He gained absolute property of the fish upon capturing and killing it. If the fish was caught by unauthorised people instead, the absolute property in the fish remained with the landowner.³³ Likewise, if a “wild” animal was captured by unlawful means, such as trespassing on another’s property, the trespassing hunter cannot claim ownership over the game animal even if he successfully killed it.³⁴ This being said, the “wild” animal could also become free game again if it managed to escape into the wild.

In practice, the distinction drawn between “domestic” and “wild” animals was unsatisfactory.³⁵ It resulted in inconsistent case law that declared homing pigeons³⁶ and circus elephants³⁷ “wild” while a zoo camel³⁸ was deemed “domestic”.

Plants at common law. — At common law, “land” encompasses “all trees, shrubs, hedges, plants, and flowers growing thereon, whether cultivated or wild” because their growth cannot be separated from the land.³⁹ Thus, the general position was that the owner of the land on which the plant is growing is also the owner of the plant.

Legislative history of animal protection. — In Singapore, birds were the first wildlife to receive protection with the enactment of *The Wild Birds Protection Ordinance, 1884* [1884 Ordinance].⁴⁰ This Ordinance prohibited the unlicensed killing, wounding, or taking of any wild bird other than the 33 species that were listed in the Schedule. These species listed were the snipe (bĕrbik or tĕtĭru), painted snipe (mĕrĕgi or bĭrong Siam), teal (bĕlĭbis; Fig. 4.1), wild duck (ĭtek ĕyer; Fig. 4.2), variety of green pigeon (pĕnei gĕding; Fig. 4.3), common green pigeon (pĕnei daun), ground pigeon (pĕnei tĕnah, limbok, or dĕkut; Fig. 4.4), kuaran (Fig. 4.5), stock dove (pĕrgam; Fig. 4.6), rĕwa (Fig. 4.7), grey or golden plover (chĕrĕling, chĭchiau), kapĕla bĕsar, sentak, snippet (engga-engga), sandpiper (kĕdĭdi laut), jungle fowl (ayam hĭtan; Fig. 4.8), pheasant (pĕgar), quail (pĕyoh, pĭkar), curlew (bĭrong pĭsau rĕut), padi bird (pĭchong), ayam-ĕyam, sĕlantĭn or sĭrong lantĭn, argus pheasant (kĕau or kwang), kĕau chĕrmin, bĭrong siol (Fig. 4.9), lang bumbun (Fig. 4.10), lang rimba, lang kĭching, lang kĭching pĕteh, lang pĕya, lang batik, lang mĕrah (Fig. 4.11) and lang mĕlam.

³¹ *Case of Swans* (1592), 7 Co. Rep. 15b, cited in Lye, “Wildlife Protection Laws”, supra note 29 at 290.

³² *Nicholls v. Ely Beet Sugar Factory Ltd* [1936] Ch 343 at 347, cited in Kevin Gray & Susan Francis Gray, *Elements of Land Law*, 5th ed. (New York: Oxford University Press Inc., 2009) at 55.

³³ *Ibid.*

³⁴ *Blade v. Higgs* (1865), 11 H.L. Cas. 621, cited in Lye, “Wildlife Protection Laws”, supra note 29 at 291.

³⁵ *Ibid.*

³⁶ *Hamps v. Darby*, [1948] 2 K.B. 311 at 320f, cited in Lye, “Wildlife Protection Laws”, supra note 29 at 290.

³⁷ *Filburn v. People’s Palace and Aquarium Co. Ltd* (1890), 23 Q.B.D. 258 at 260f, cited in Lye, “Wildlife Protection Laws”, supra note 29 at 290.

³⁸ *McQuakers v. Goddard*, [1940] 1 K.B. 687, cited in Gray & Gray, supra note 32 at 49–50.

³⁹ *Bl Comm*, Vol II; *Stukeley v. Butler* (1615), Hob 168 at 170, 80 ER 316 at 317, cited in Gray & Gray, supra note 32 at 48–49. Under section 4(1) of the existing Land Titles Act (Cap. 157, Rev. Ed. 2004), the term “land” includes “all vegetation growing” on the surface of any defined parcel of earth or any parcel of airspace.

⁴⁰ (S.S.) (No. 3 of 1884).



Fig. 4.1. Teal (bĕlibis; *Dendrocygna javanica*). (Photograph by: Kelvin Lim).



Fig. 4.2. Wild duck (itek âyer; *Nettapus coromandelianus*). (Photograph by: JJ Harrison).



Fig. 4.3. Jambu fruit dove (pûnei gâding; *Ptilinopus jambu*). (Photograph by: Eddy Lee).



Fig. 4.4. Ground pigeon (pûnei tânah, limbok or dëkut; *Chalcophaps indica*). (Photograph by: [Arthur D. Chapman](#)).



Fig. 4.5. Kuaran (Black-crowned night heron; *Nycticorax nycticorax*). (Photograph by: Dick Daniels).



Fig. 4.6. Stock dove (përgam; *Columba oenas*). (Photograph by: Mark Kilner).



Fig. 4.7. Pied imperial pigeon (râwa; *Myristicivora bicolor*). (Photograph by: Yap Lip Kee).



Fig. 4.8. Jungle fowl (ayam hutan; *Gallus ferugineus*). (Photograph by: Wee Yeow Chin).



Fig. 4.9. Crested wood partridge (bûrong siol; *Rollulus roulroul*). (Photograph by: Brian Gratwicke).



Fig. 4.10. Changeable hawk eagle (lang bumbun; *Spizaetus limnaetus*). (Photograph by: Yap Lip Kee).



Fig. 4.11. Brahminy kite (lang mērah; *Haliastur indus intermedius*). (Photograph by: Jim Bendon).

The penalty for unlicensed killing, wounding or taking any other wild bird was a fine of not more than \$2 for each bird or a jail term not exceeding 14 days or both.⁴¹ Stiffer penalties of a fine up to \$50 or a jail term not exceeding one month or both were imposed for procuring and instigating others to kill, wound or take wild birds.⁴² These provisions suggest that the legislators recognised the need to curb the demand for such trade altogether, as opposed to only punishing the offenders.

The Ordinance also contained other provisions which facilitated an effective scheme of protecting wild birds. Section 4 of the *1884 Ordinance* created a reversible presumption that any person found in possession of a wild bird, its skin or plumage had acquired it unlawfully. The Governor in Council was also empowered by section 7 to create orders to exempt particular wild birds from the operation of the Act.

Other wildlife was only granted similar protection when *The Wild Animals and Birds Protection Ordinance 1904* [*1904 Ordinance*]⁴³ was enacted. The *1904 Ordinance* was “considered advisable, without introducing any enactment resembling the game laws of Europe to protect wild animals and birds to such an extent as to prevent their extinction”.⁴⁴ Although it repealed the *1884 Ordinance*, the original list of exempted birds was retained with one additional entry—the sentak. It remains unclear whether a sentak is a bird or wild animal.⁴⁵

The *1904 Ordinance* granted wider powers to the Governor in Council. For instance, he was empowered to issue Orders to announce close times and breeding seasons. Several Orders were made to establish close seasons for wild animals and birds such as the [sambar] deer (*rusa*; Fig. 4.12), barking deer (*kijang*), mouse deer (*pelandok*; Fig. 4.13), fireback pheasant (*pegar*),⁴⁶ pig-tailed monkey (*berok*; *Macaca nemestrina*), pangolin (*tenggiling*; *Manis javanica*; Fig. 4.14), and the slow loris (*kongkong*, *kukang*; *Nycticebus coucang*; Fig. 4.15).⁴⁷ Full protection was eventually granted to the sambur deer and barking deer,⁴⁸ and later in 1924, the green pigeon (*punai daun*) and pigeon (*[Ptilinopus] jambu*).⁴⁹ Significantly, the green pigeon was previously a scheduled bird species that was exempted from protection under both the *1884 Ordinance* and *1904 Ordinance*.

Changes were also made to the penalties and offences. The quantum of the fine for unlicensed killing, wounding or taking any protected wild animal or bird was altered from \$2 per bird to a single sum of not more than \$25.⁵⁰ The abetment provision was also removed. A new section 3 was added which exempted occupiers and persons-in-charge of cultivated land from liability when they killed or took any wild bird which was found to be “damaging or destroying the crops growing thereon”.

⁴¹ *Ibid.*, section 3.

⁴² *Ibid.*, section 5.

⁴³ (S.S.) (No. XVI of 1904) [*1904 Ordinance*].

⁴⁴ (S.S.) Bill, *The Wild Animals and Birds Protection Ordinance 1904*, G.N. S 1132/1904 at Objects and Reasons.

⁴⁵ There appears to be a fish that was commonly known as the ikan sentak (unidentified species). R.J. Wilkinson, *A Malay-English Dictionary (Romanised)* (London: MacMillan & Co Ltd, 1955) s.v. “sentak”.

⁴⁶ G.N. S 169/1905.

⁴⁷ *Wild Animals and Birds Protection Order, 1937* (G.N. S 294/1947 Rev. Ed. Sing.), cited in Lye, “Wildlife Protection Laws”, *supra* note 29 at 293–294.

⁴⁸ G.N. S 955/1923.

⁴⁹ G.N. S 1295/1924, cited in Lye, “Wildlife Protection Laws”, *supra* note 29 at 293.

⁵⁰ *1904 Ordinance*, *supra* note 43, section 3.



Fig. 4.12. Sambar deer (rusa; *Rusa unicolor*). (Photograph by: Kelvin Lim).



Fig. 4.13. Greater mouse deer (pelandok; *Tragulus napu*). (Photograph by: Kelvin Lim).



Fig. 4.14. Sunda pangolin (tenggiling; *Manis javanica*). (Photograph by: Norman Lim).



Fig. 4.15. Slow loris (kongkong or kukang; *Nycticebus coucang*). (Photograph by: Norman Lim).

In addition, section 6 penalised unauthorised use of spring guns, engine pitfalls, sharpened stakes, or other contrivances that were “likely to endanger human life or inflict grievous hurt”.

Apart from the *1904 Ordinance*, there were also restrictions on importation and exportation of animals. The *Plumage Ordinance*,⁵¹ which was operational from 1916 to 1970, banned the importation and exportation of plumage. There were also several Orders made to prohibit importing certain animals and birds. Examples include the Order 1685 of 1930 which banned imports of orang [utan] and Order 317 of 1937 which prohibited imports of the Malayan bear.⁵²

Legislative history of plant protection. — The *Forest Ordinance*⁵³ was enacted in 1908 to protect certain areas as forest reserves. The Ordinance was enacted based on the recommendations of the superintendent of the Botanic Gardens, Nathaniel Cantley, who advocated the preservation of the forests and forest produce.⁵⁴ Under the *Forest Ordinance*, it was an offence to trespass and graze cattle in a forest reserve. It was also an offence for unauthorised persons to cut, collect, or remove any forest produce such as soil, minerals, plant parts, honey, wax, and guano.

The *Forest Ordinance* gazetted 15 areas as forest reserves: Ang Mo Kio, Bukit Panjang, Bukit Mandai, Bukit Timah, Changi, Chua Chu Kang, Jurong, Kranji, Murai, North Seletar, Pandan, South Seletar, Sungei Buloh, Sembawang, and Tuas.⁵⁵ However, despite the Ordinance, all except the Bukit Timah forest continued to be used for timber logging.⁵⁶ Subsequently, these areas were degazetted.⁵⁷ Koh Kheng Lian opined that this was necessary because “the island was being opened up for development”.⁵⁸ This move was later partially reversed when the Bukit Timah, Pandan, and Kranji forest reserves were re-gazetted in 1939 and “placed under the care of the Director of the Botanic Gardens, who was also the Conservator of Forests”.⁵⁹

Legislative history of nature reserves. — The *Nature Reserves Ordinance*⁶⁰ was passed in response to a Select Committee’s report on the effect of granite quarrying and its impact on nature reserves. It set aside nature reserves for “propagation, protection, and preservation of the indigenous fauna and flora of Singapore”, “preservation of objects and places of aesthetic, historical or scientific interest” and to provide “under suitable conditions and control facilities for the study of and research into matters relating to the fauna and flora of Singapore and the physical conditions in which they live”.⁶¹

⁵¹ (S.S.) (No. 16 of 1924).

⁵² Lye, “Wildlife Protection Laws”, supra note 29 at 294.

⁵³ (S.S.) (No. XXIL of 1908).

⁵⁴ Lye, “Wildlife Protection Laws”, supra note 29 at 295.

⁵⁵ Notification No. 1240 of 1908.

⁵⁶ Koh, supra note 18 at 151.

⁵⁷ G.N. S 1519/1910, G.N. 1163/1935, G.N. S 1052/1938, and G.N. S 1766/1939.

⁵⁸ Koh, supra note 18 at 151.

⁵⁹ G.N. S 220/1939 and G.N. S 2087/1939, as cited in Lye, “Wildlife Protection Laws”, supra note 29 at 295.

⁶⁰ No. 15 of 1951.

⁶¹ Section 3, *Nature Reserves Act* (Cap. 205, 1985 Rev. Ed. Sing). This was the later version of the 1951 Ordinance. It was subsequently repealed in 1990, cited in Lye, “Wildlife Protection Laws”, supra note 29 at 295.

CURRENT LAWS

A. KEEPING ANIMALS

Introduction. — Apart from six species of birds,⁶² section 5 of the *Wild Animals and Birds Act*⁶³ [WABA] protects all wild animals and birds from being kept without a licence. The penalty on conviction is a fine of up to \$1,000 and forfeiture of the wild animal or bird.⁶⁴ The Director-General of the AVA or an authorised officer may compound the offence by collecting up to \$500 from a person who has been reasonably suspected of committing the offence.⁶⁵ (Please refer to the section on Animal Protection Laws for a detailed discussion on the enforcement powers of AVA.)

Section 2 of the WABA defines “wild animals and birds” as “all species of animals and birds of a wild nature, but does not include domestic dogs and cats, horses, cattle, sheep, goats, domestic pigs, poultry and ducks”. Although this appears to be fairly uncontroversial, the fact that the Act does not define “animal” means that recourse must be made to the definition of “animal” in the *Interpretation Act*. Under the *Interpretation Act*, the term “animal” which “includes bird, reptile, fish and every kind of vertebrate animal and the young thereof” has been the source of concern for some members of the scientific and legal communities.⁶⁶ Applying the statutory interpretation canon *expressio unius est exclusio alterius*,⁶⁷ which means “the express mention of certain things means that if anything is not mentioned it is intended to be excluded”,⁶⁸ invertebrates, such as starfish and insects, are likely to be excluded. Thus far, the courts have not been required to make a pronouncement on the scope of the term “animal” in the *Interpretation Act*.

Certain wild animals. — Ownership and licensing matters concerning certain wild animals and their young are dealt with under the *Wild Animals (Licensing) Order*⁶⁹ [WALO]. Section 3 of the WALO reiterates that “[n]o person shall own, keep, harbour or maintain any wild animal without a licence granted by the licensing officer under the provisions of this Order”. However, the First Schedule provides an exhaustive list of “wild animals”: kangaroos, wallabies, monkeys (including orang utans, apes, chimpanzees, siamangs, gorillas, gibbons, and baboons), carnivores (including tigers, lions, leopards, panthers, jaguars, pumas, cheetahs, wild cats, jackals, and hyenas, but excluding domesticated cats and dogs), bears, pandas, elephants, hoofed-animals (including tapirs, rhinoceros, zebra, wild boars, hippopotamuses, camels, deer, antelope, and giraffes, but excluding domesticated horses, asses, mules, goats, pigs, cattle, and buffalo), sea-cows, seals, sea lions,

⁶² The six species are the house crow (*Corvus splendens*), the feral pigeon (*Columba livia*), the purple-backed starling (*Sturnus sturninus*), the Philippine glossy starling (*Aplonis panayensis*), the common myna (*Acridotheres tristis*), and the white-vented myna (Javan myna; *Acridotheres javanicus*). The house crow has been unprotected since 1974 (G.N. S 123/1974) while the latter five became unprotected in 1991 (G.N. S 570/1991).

⁶³ Cap. 351, 2000 Rev. Ed. Sing. [WABA].

⁶⁴ *Ibid.*, section 5.

⁶⁵ *Wild Animals and Birds (Composition of Offences) Order 2005* (G.N. S 174/2005 Sing.), section 2.

⁶⁶ C.J. Hails, “The Law and Conservation in Singapore” (Proceedings of a Public Education Forum organised by the Malayan Nature Society, delivered at the Singapore Science Centre, 24 May 1987) at 13; Lim-Lye Lin Heng, “An Analysis of Wildlife Protection Law” (Proceedings of a Public Education Forum organised by the Malayan Nature Society, delivered at the Singapore Science Centre, 24 May 1987) at 18; Lye, “Wildlife Protection Laws”, *supra* note 29, at 302; Koh, *supra* note 10 at 159.

⁶⁷ Lye, “Wildlife Protection Laws”, *supra* note 29 at 310.

⁶⁸ Beckman, Coleman & Lee, *supra* note 10 at 351.

⁶⁹ Cap. 351, O. 2, 1990 Rev. Ed. Sing. [WALO].

walruses, and dolphins. According to Lye Lin Heng, “in practice, it appears that the AVA has not issued licences for the keeping of any wild animal for many years”.⁷⁰

Sections 4 to 6 of the *WALO* outline the licensing process. Section 4(1) stipulates that an applicant must apply for the grant of a licence. An application may be granted or rejected by the licensing officer without reason.⁷¹ Each licence is valid for one animal and it costs \$110 and expires on 31 Dec. of that year, unless it has been revoked earlier.⁷² It is not a transferable licence⁷³ so the new owner of an animal which was sold or given away must apply for a fresh licence. The licence can be revoked without notice if the licensing officer deems it necessary in public interest to do so.⁷⁴ However, the licensing officer must give notice in writing of his intention to revoke the licence at least 14 days in advance and on any of these grounds: (1) the licensee is flouting or has flouted a provision under the *WABA* or *WALO*; (2) the licensee is no longer a fit and proper person to hold the licence; or (3) the licensee has been convicted of an offence under the *WABA* or *WALO*, or any of the licensee company’s managerial or executive officers has been convicted of an offence under the *WABA* or *WALO*.⁷⁵ The licensee may appeal to the Minister to challenge the revocation and the Minister’s decision shall be final.⁷⁶ Throughout the appeal period, revocation continues and a licence will be reissued only if the decision is reversed.⁷⁷ Upon revocation, the animal must be delivered to wherever directed by the notification within seven days, failing which the animal will be seized by the licensing officer at the former licensee’s expense.⁷⁸

Birds. — There are no equivalent regulations under the *WABA* for the licensing of birds. While this omission would suggest that any keeping of birds in Singapore contravenes section 5 of the *WABA*, the authorities appear to have adopted a “benign interpretation”.⁷⁹ This is evinced by the prevalence of recreational bird-keeping and songbird competitions which are regularly organised by community centres. Public spaces such as the Tiong Bahru Bird Arena have also been designated for displaying caged birds. The AVA clearly adopts this view. In a forum letter issued to *Today* newspaper dated 28 Feb.2006, AVA stated that “birds, including those which come from the wild, do not require any licence to be kept as pets”.⁸⁰

⁷⁰Lye Lin Heng, “Nature Conservation Laws—The Legal Protection of Flora and Fauna in Singapore” in G.W.H. Davison, P.K.L. Ng & H.C. Ho, eds., *The Singapore Red Data Book: Threatened Plants and Animals of Singapore*, 2d ed., (Singapore: The Nature Society (Singapore), 2008) at 10.

⁷¹ *WALO*, supra note 69, section 4(2).

⁷² *Ibid.*, section 5.

⁷³ *Ibid.*, section 5(4).

⁷⁴ *Ibid.*, section 6(1)(b).

⁷⁵ *Ibid.*, section 6(1)(a).

⁷⁶ *Ibid.*, section 6(4).

⁷⁷ *Ibid.*, section 6(5).

⁷⁸ *Ibid.*, section 7.

⁷⁹ Lye, “Wildlife Protection Laws”, supra note 29 at 309.

⁸⁰ AVA letter to *Today* Forum Page, 28 Feb.2006, “Sharks OK in Condominium”. Retrieved 16 Jul.2010 from http://www.ava.gov.sg/NR/rdonlyres/6D432824-F39A-4669-AA60-3657A0B31084/13615/TodaySharks_28Feb06.pdf. [AVA, “Sharks OK in Condominium”]. This statement should be qualified because the possession of certain endangered species without valid import permits is an offence under the Endangered Species Act (Cap. 92A, 2008 Rev. Ed. Sing.). See Section 4(b) “Trade in endangered species”, below.

Pigeons. — Under rule 3(1) of the *Animals and Birds (Pigeons) Rules* [*Pigeon Rules*],⁸¹ no one is allowed to use any premises to keep, harbour, roost, nest or breed pigeons unless he is licensed by the Director of Primary Production⁸² or a duly authorised officer. The penalties for breaching this rule are a fine of no more than \$500 and forfeiture of the pigeons.⁸³

The *Pigeon Rules* define the term “pigeon” as including “all varieties of the domestic pigeon”.⁸⁴ It is submitted that this definition is too vague. The feral pigeon (*Columba livia*; Fig. 5.1) is traditionally regarded as the ancestral species of domestic pigeon breeds.⁸⁵ In any case, all the feral pigeons in Singapore are not native in origin and are most likely descendants of domesticated stocks, so they are likely to be covered by the *Pigeon Rules*. If this is correct, then it would be inconsistent with the WABA which states that the feral pigeon is one of the six bird species which are exempted from licensing requirements. It may be that the legislators had other types of pigeons or even doves in mind when they drafted the *Pigeon Rules*, but given the present wording, its exact scope remains unclear. Some possibilities may include the pink-necked pigeon (*Treron vernans*; Fig. 5.2), zebra dove (*Geopelia striata*; Fig. 5.3), spotted dove (*Streptopelia chinensis*; Fig. 5.4), red turtle-dove (*Streptopelia tranquebarica*), and turtle-dove (*Streptopelia turtur*).

Each licence costs \$50 and expires on 31 Dec. of that year, unless it is revoked earlier.⁸⁶ The licensing officer may refuse to issue or renew the licence without providing reasons and the licence is not transferable without prior approval.⁸⁷ Even after obtaining a licence, the licensee must also comply with other requirements. He must ensure that the premises are constructed in such a way that the pigeons are contained within the premises.⁸⁸ He shall keep his pigeons in captivity⁸⁹ and ensure that they do not “become a nuisance to his neighbours and members of public”.⁹⁰ The owner or occupier of the premises shall be presumed to be the person keeping the pigeons.⁹¹ He must comply with orders when notified in writing to “destroy or remove the breeding, nesting or roosting place of the pigeons” within a specified time frame. If these rules are not complied with, the individual is liable on conviction to a fine of not more than \$500.⁹²

⁸¹ Cap. 7, R. 4, 1990 Rev. Ed. Sing. [*Pigeon Rules*].

⁸² Given that the Primary Production Department was the predecessor to the AVA, this refers to the Director-General of the Agri-food and Veterinary Services.

⁸³ *Pigeon Rules*, supra note 81, rule 3(2).

⁸⁴ Ibid., rule 2. N.S. Sodhi & Ilsa Sharp, *Winged Invaders: ‘Pest’ Birds of the Asia-Pacific* (Singapore: SNP, 2006) at 87 (In particular, the turtle dove is noted to be “easily tamed in captivity and valued for its gentle value”).

⁸⁵ L.F. Baptista, J.E. Martínez Gómez & H.M. Horblit, “Darwin’s Pigeons and the Evolution of the Columbiforms: Recapitulation of Ancient Genes” (2009) 25(3) *Acta Zoológica Mexicana* (n.s.) 719–741, online: <<http://scielo.unam.mx/pdf/azm/v25n3/v25n3a23.pdf>>.

⁸⁶ *Pigeon Rules*, supra note 81, rule 5.

⁸⁷ Ibid., rules 4(2) and 4(4).

⁸⁸ Ibid., rule 7.

⁸⁹ Ibid., rule 8.

⁹⁰ Ibid., rule 9.

⁹¹ Ibid., rule 12.

⁹² Ibid., rule 17.



Fig. 5.1. Feral pigeon (*Columba livia*). (Photograph by: Wee Yeow Chin).



Fig. 5.2. Pink-necked pigeon (*Treron vernans*). (Photograph by: Kelvin Lim).



Fig. 5.3. Zebra dove (merbok; *Geopelia striata*). (Photograph by: Wee Yeow Chin).



Fig. 5.4. Spotted dove (tekukur; *Streptopelia chinensis*). (Photograph by: Wee Yeow Chin).

Non-commercial poultry. — Rule 3(1) of the *Animals and Birds (Prevention of Avian Disease in Non-commercial Poultry) Rules*⁹³ [Non-commercial Poultry Rules] makes it an offence to keep more than 10 non-commercial poultry. The penalty for breaching the rule is a fine not exceeding \$10,000 or a jail term of not more than 12 months or both.⁹⁴ “Poultry” is broadly defined to include “chickens, ducks, turkeys, geese, partridges, pheasants, domestic pigeons, guinea fowl, swans and peacocks” (Figs. 5.5–5.8).⁹⁵ Non-commercial poultry refers to poultry that is not kept in a slaughter-house or farm, not kept or displayed in a pet shop, or not kept or used for research purposes.⁹⁶ Rule 3(1) does not apply to authorised owners or operators of an “outdoor recreational premise” such as a park, resort or golf course who have duly vaccinated all the poultry.⁹⁷



Fig. 5.5. Black swans (*Cygnus atratus*) are considered poultry. (Photograph by: Wee Yeow Chin).

⁹³ Cap. 7, R.12, 2007 Rev. Ed. Sing.

⁹⁴ *Ibid.*, rule 5(a).

⁹⁵ *Ibid.*, rule 2.

⁹⁶ *Ibid.*

⁹⁷ *Ibid.*, rule 3(2).



Fig. 5.6. Guinea fowl (*Numida meleagris*) are considered poultry. (Photograph by: Wee Yeow Chin).



Fig. 5.7. Ducks are considered poultry. (Photograph by: Kelvin Lim).

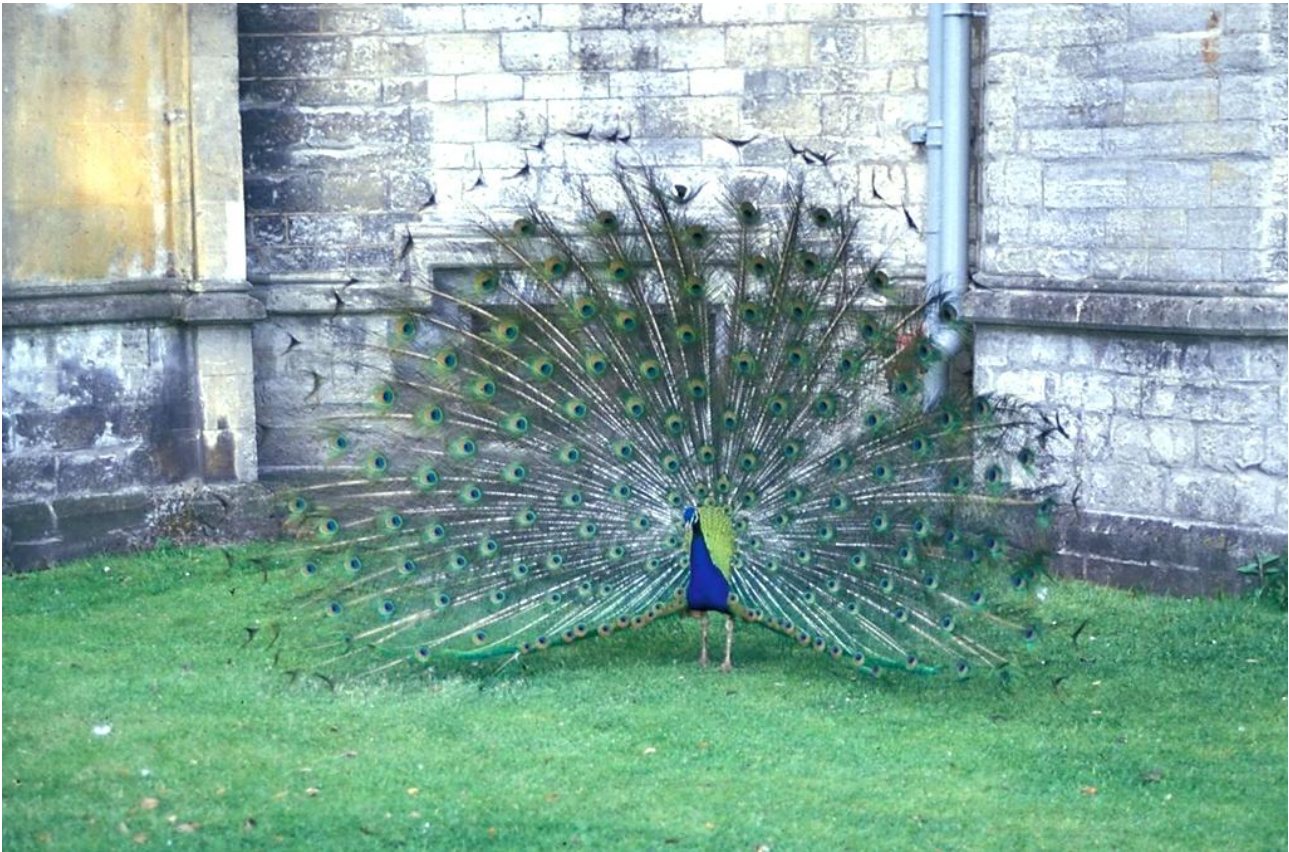


Fig. 5.8. The male peacock (*Pavo cristatus*) shown here is considered poultry. (Photograph by: Wee Yeow Chin).

The non-commercial poultry must be housed in bird-proof cages or enclosures that comply with certain specifications. These are a fine wire mesh netting to keep birds and animals other than the non-commercial poultry from establishing contact with each other, and a proper roof that keeps away “droppings, waste, feathers and other particles” belonging to any other bird or animal.⁹⁸

The *Non-commercial Poultry Rules* provide the Director-General or an authorised officer with the power to issue directives to breeders or keepers to instruct them to take certain measures for an impending or actual avian disease outbreak.⁹⁹ These directives may be issued via a variety of channels, such as personal or postal delivery to concerned persons, publication in daily newspapers, radio and television broadcasts or electronically (including websites).¹⁰⁰ Unless an individual provides a reasonable excuse for non-compliance, if convicted, he will be liable to a fine of not more than \$10,000 or a jail term not more than 12 months or both.¹⁰¹

⁹⁸ Agri-food and Veterinary Services, Directive, “In Exercise of the Power under Rule 3(1) of the Animals and Birds (Prevention of Avian Disease in Non-commercial Poultry) Rules 2006” (2 Oct.2006), online: Agri-food and Veterinary Services <http://www.ava.gov.sg/NR/rdonlyres/0CA18578-7610-4917-BB67-C7DF4B96504B/17789/2122web_AB_PreventionofAvianDiseaseinNonCommercial.pdf>.

⁹⁹ *Non-commercial Poultry Rules*, supra note 93, rule 4(1).

¹⁰⁰ *Ibid.*, rule 4(2).

¹⁰¹ *Ibid.*, rule 5(b).

Live poultry on Pulau Ubin. — Live poultry cannot be kept or bred on Pulau Ubin.¹⁰² Live poultry is also prohibited from being purchased, sold, imported into or exported from Pulau Ubin.¹⁰³ Individuals convicted of breaching these rules are liable to a fine of up to \$10,000 or a jail term of up to 12 months or both.¹⁰⁴

Piranhas. — Under rule 2 of the *Fisheries (Piranha) Rules*¹⁰⁵ [*Piranha Rules*], individuals are prohibited from keeping, breeding, selling, exporting and importing the piranha (Figs.5.9, 5.10). Rule 3 makes it an offence to release a piranha into “any stream, river, canal, channel, watercourse, reservoir, lake or other body of water”.¹⁰⁶ Convicted offenders will be liable to a fine of up to \$50,000 or a jail term of not more than one year or both.¹⁰⁷

It is suggested that similar rules should apply to other fish species that may endanger human lives or severely disrupt the native ecosystem if released into water bodies. Currently, although section 13(4) of the *Fisheries Act* empowers the Minister to provide rules which relate to the prohibition, regulation or control of “any other prescribed dangerous species of fish”, no rules have been passed apart from the *Piranha Rules*. Examples of potentially dangerous aquatic species include the electric eel (*Electrophorus electricus*; Fig. 5.11), the motoro stingray (*Potamotrygon motoro*; Fig. 5.12), and the alligator gar (*Atractosteus spatula*; Fig. 5.13). The latter two species have



Fig. 5.9. Red-bellied piranha (*Pygocentrus nattereri*). (Photograph by: Mark Sabaj Pérez).

¹⁰² *Animals and Birds (Prohibition of Live Poultry on Pulau Ubin) Rules* (Cap. 7, R.11, 2007 Rev. Ed. Sing.), Rule 3(1)(a).

¹⁰³ *Ibid.*, rules 3(1)(b) and 3(1)(c).

¹⁰⁴ *Ibid.*, rule 5.

¹⁰⁵ Cap. 111, R. 3, 1990 Rev. Ed. Sing.

¹⁰⁶ *Ibid.*, rule 3.

¹⁰⁷ *Ibid.*, rule 4.



Fig. 5.10. Red-bellied pacu (*Colossoma bidens*) are often mistaken as piranha. (Photograph by: Ng Ting Hui).



Fig. 5.11. Electric eel (*Electrophorus electricus*). (Photograph by: Mark Sabaj Pérez).

already been detected in certain local reservoirs,¹⁰⁸ most likely because they were released or discarded aquarium fish.¹⁰⁹ It should be noted that the alligator gar can grow up to 3 metres in length¹¹⁰ and even though it is not known whether the species attacks humans, it is a known

¹⁰⁸ Ng Heok Hee & Tan Heok Hui, “An Annotated Checklist of the Non-Native Freshwater Fish Species in the Reservoirs of Singapore” (2010) 6(1) COSMOS 95 at 96.

¹⁰⁹ Ibid. at 113.

¹¹⁰ ZipcodeZoo.com, *Atractosteus spatula*, online: ZipcodeZoo.com <http://zipcodezoo.com/Animals/A/Atractosteus_spatula/>.

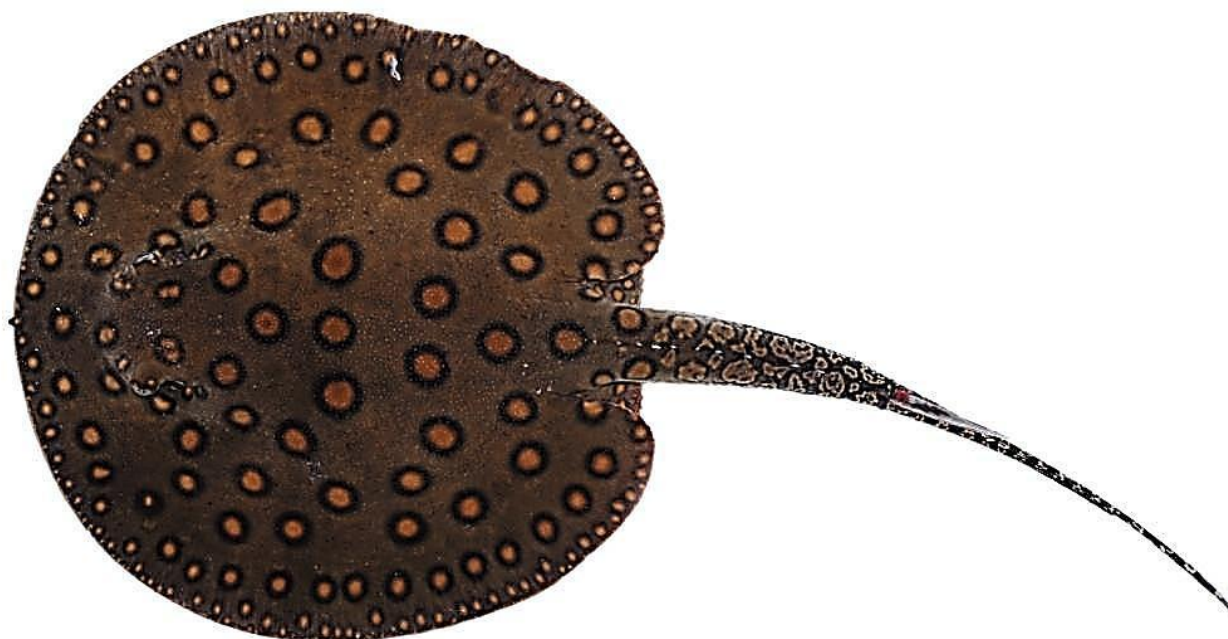


Fig. 5.12. Motoro stingray (*Potamotrygon motoro*), a South American freshwater fish. (Photograph by: Tan Heok Hui).



Fig. 5.13. Alligator gar (*Atractosteus spatula*). (Photograph by: Ng Heok Hee).

predatory fish which is equipped with sharp teeth.¹¹¹

A regulation, like rule 2, which prohibits keeping, breeding, selling, and exporting other potentially dangerous aquatic species should be introduced from the outset to help control numbers. Arguably, the *Animals and Birds (Live Fish) Rules 2011*¹¹² [*Live Fish Rules*] serves this purpose by requiring all commercial dealers or suppliers to acquire a licence and relevant permits for every consignment of live fish. Nonetheless, it is submitted that it would be much clearer if a banned or restricted list of fish species was provided instead. Doing so would not be counterproductive to Singapore's position as a major ornamental fish breeder because such fish species are quite unlikely to be ornamental fishes in the first place.

The release of such potentially harmful fish species into any water body should also be prohibited. Presently, it is only an offence to release animals in nature reserves,¹¹³ reservoirs, Catchment Area Parks¹¹⁴, the Chinese Garden, Japanese Gardens, and the one-north Park.¹¹⁵ This is problematic since aquatic species can move easily between connected water bodies, including drains.

Additionally, it is submitted that the maximum fine for releasing fish and other animals should be reviewed. Presently, the quantum varies significantly depending on the location where the animal was released. For comparative purposes, it bears repeating that the release of a piranha into any water body attracts a fine of up to \$50,000 and a jail term of up to one year or both. The penalties for the release of any animal into a nature reserve is a fine of the same maximum quantum but a shorter maximum jail term of six months or both,¹¹⁶ whereas a release into reservoirs and Catchment Area Parks or the JTC parks only attracts a fine of \$3,000¹¹⁷ or \$500,¹¹⁸ respectively. Given that reservoirs form a significant part of Singapore's water supply and recreational space, the quantum of the fine could be enhanced to reflect the significance of keeping these waters safe.

Cattle. — Under the *Cattle Act*,¹¹⁹ a licence is required for cattle to be kept at any place.¹²⁰ Any individual “who without a licence uses any place or permits it to be used for the purpose of keeping cattle” is liable to be fined up to \$1,000 or a jail term of not more than 12 months or both.¹²¹ Section 2 defines “cattle” as including “horses, cows, oxen, sheep, goats and swine” (Fig. 5.14).

¹¹¹ National Geographic, *Alligator Gar*, online: National Geographic <<http://environment.nationalgeographic.com/environment/freshwater/alligator-gar>>.

¹¹² G.N. S 27/2011 [*Live Fish Rules*].

¹¹³ *Parks and Trees Act* (Cap. 216, 2005 Rev. Ed. Sing.) [*PTA*], section 9(3).

¹¹⁴ *Public Utilities (Reservoirs and Catchment Area) Regulations* (G.N. S 401/2006) [*Catchment Area Regulations*], regulation 6(f).

¹¹⁵ *Jurong Town Corporation (Parks) Regulations* (Cap. 150, Reg. 2, 1990 Rev. Ed. Sing.) [*JTC Parks Regulations*], regulation 4(21).

¹¹⁶ *PTA*, supra note 113, section 9(3) read with section 9(4).

¹¹⁷ *Catchment Area Regulations*, supra note 114, regulation 41.

¹¹⁸ *JTC Parks Regulations*, supra note 115, regulation 11(2).

¹¹⁹ Cap. 34, 2002 Rev. Ed. Sing.

¹²⁰ *Ibid.*, section 4(4).

¹²¹ *Ibid.*, section 4(5).



Fig. 5.14. Sheep (Photograph by: Kelvin Lim).

It should be noted that the *Cattle Act* provides that the NEA may declare areas where cattle may not be kept and seized and slaughtered immediately if found.¹²² There will be no compensation for the cattle “slaughtered and disposed of”.¹²³ The penalty for keeping cattle within a restricted area is a fine of not more than \$1,000 or a jail term of up to 12 months or both.¹²⁴ The *Cattle (Unrestricted Areas) Notification*¹²⁵ decreed that cattle may only be kept in the following areas: Lim Chu Kang Agrotechnology Park and the surrounding area outside the water catchment area, the Sembawang Field Experimental Station, Jurong Abattoir and the Annual Quarantine Station, Kim Chuan Abattoir, 15 Tech Park Crescent, some offshore islands, and the Singapore Zoological Gardens. This list should be updated because the Kim Chuan Abattoir has already ceased operations.

Dogs. — The *Animals and Birds (Dog Licensing and Control) Rules*¹²⁶ [*Dog Licensing Rules*] states that it is an offence to keep a dog above the age of three months without a dog licence.¹²⁷ In

¹²² Ibid., sections 3(1) and 3(2).

¹²³ Ibid., section 3(4).

¹²⁴ Ibid., section 3(5).

¹²⁵ Cap. 34, N. 1, 1990 Rev. Ed. Sing.

¹²⁶ Cap. 7, R. 1, 2007 Rev. Ed. Sing. [*Dog Licensing Rules*].

¹²⁷ Ibid., rule 3(1) as amd. by *Animals and Birds (Dogs Licensing and Control) (Amendment) Rules*, G.N. S 686/2010 Sing. [*Dogs Licensing Amendment Rules*].

addition, no more than three dogs may be kept in any premises (other than licensed dog farms) unless permitted by the Director-General of Agri-food and Veterinary Services.¹²⁸

Each dog licence is non-transferrable and valid for one year from the date of issue.¹²⁹ Licences for both sterilised dogs and dogs below the age of five months cost \$15 per year.¹³⁰ In contrast, licences for non-sterilised dogs and fourth or subsequent dogs (sterilised or not) cost \$90 and \$180 per year, respectively.¹³¹ If the licensee fails to renew the licence before it expires, he will have to undergo the licence application process anew.¹³² The licence can be revoked by the Director-General. In such cases, the licensee must surrender the dog within seven days or transfer the ownership and custody of the dog when there is written approval of the Director-General to do so.¹³³

If the dog is lost or dead or the licensee is “no longer keeping his dog”, he must inform the Director-General and present the relevant documentary proof.¹³⁴ Presumably, this includes a situation where there has been a transfer of ownership of the dog. The licensee must also notify the Director-General within 28 days in writing if there has been a change in where the dog is kept or the address stated in the licence.¹³⁵ Violating these rules renders the offender liable to a fine of up to \$5,000.¹³⁶ The requirement of a dog badge has been repealed with effect from 15 Nov.2010.

Any person who owns dogs belonging to the breeds specified in the Second Schedule of the *Dog Licensing Rules* must comply with more rigorous requirements. This set of rules was recently strengthened by the AVA in light of two incidents where five rottweilers attacked a man and a Jack Russell terrier.¹³⁷ The new measures restrict each owner to only one dog of any specified breed, unless otherwise permitted by the Director-General.¹³⁸ This stricter limit only applies to dog owners who obtained the dog licences on or after 15 Nov.2010.¹³⁹ It does not apply to owners with valid unrevoked licences held immediately before 15 Nov.2010 and those who renewed the dog licences less than 12 months after expiration of the previous licence.¹⁴⁰

Part I of the Second Schedule identifies breeds which are banned from being imported into Singapore.¹⁴¹ They are the pit bull (including the American pit bull terrier, American Staffordshire

¹²⁸ Ibid., rule 3(2) as amd. by *Dogs Licensing Amendment Rules*.

¹²⁹ Ibid., rule 4(4).

¹³⁰ Ibid. as amd. by *Dogs Licensing Amendment Rules*, Part I, First Schedule.

¹³¹ Ibid.

¹³² Ibid., rule 4(8).

¹³³ Ibid., rule 14(1).

¹³⁴ Ibid., rules 4(7)(a) and (b).

¹³⁵ Ibid., rules 7(1) and 7(4) as amd. by *Dogs Licensing Amendment Rules*.

¹³⁶ Ibid., rule 16 as amd. by *Dogs Licensing Amendment Rules*.

¹³⁷ Kon Xin Hua, “Stricter rules on dangerous dogs” *The Sunday Times* (14 Nov.2010) 1.

¹³⁸ *Dog Licensing Rules*, supra note 126, rule 3(4) as amd. by *Dogs Licensing Amendment Rules*.

¹³⁹ Ibid., rule 3(6).

¹⁴⁰ Ibid., rules 3(6) and 3(7).

¹⁴¹ AVA, Media Release, “Changes to the Animals and Birds (Dog Licensing and Control) Rules” (13 Nov.2010), online: Agri-food and Veterinary Services <<http://www.ava.gov.sg/NR/rdonlyres/F773B4DC-1DC6-467C-8C75-AD770D7E19FA/18192/CHANGESTOTHEANIMALSANDBIRSDOGLICENSINGANDCONTRLR.pdf>> at para. 3.

terrier, Staffordshire bull terrier, American bulldog, and crosses between them and other breeds; Fig. 5.15), the akita (Fig. 5.16), the Neapolitan mastiff (Fig. 5.17), the tosa (Fig. 5.18), the Dogo Argentino (Fig. 5.19), the fila Brasileiro (Fig. 5.20), the boerboel, and their crosses. In 2010, the Perro de Presa Canario was added to Part I of the Second Schedule.¹⁴² Presently, the only Part I dogs in Singapore are 22 licensed Perro de Presa Canario dogs.¹⁴³ These dogs must be implanted with a microchip¹⁴⁴ and sterilised once they are above six months of age.¹⁴⁵ Their owners must obtain an insurance policy worth at least \$100,000 “to cover any injury to persons or animals or damage to property” that their dogs may cause.¹⁴⁶ A banker’s guarantee of \$5,000 must also be given to the Director-General and it will be forfeited if the dog is reported lost or allowed in public unleashed or insufficiently muzzled.¹⁴⁷ For dog licences obtained on or after 15 Nov.2010, these



Fig. 5.15. Staffordshire bull terrier. (Photograph by: Jim McWilliam).

¹⁴² Ibid.

¹⁴³ Ibid. at Annex B.

¹⁴⁴ *Dog Licensing Rules*, supra note 126, rule 8(1)(a) as amd. by *Dogs Licensing Amendment Rules*.

¹⁴⁵ Ibid., rule 8(1)(b).

¹⁴⁶ Ibid., rule 8(1)(c).

¹⁴⁷ Ibid., rule 8(1)(d).



Fig. 5.16. Akita. (Photograph by: Gerton ten Ham).



Fig. 5.17. Neapolitan mastiff. (Photograph by: Kenjonbro).



Fig. 5.18. Tosa. (Photograph by: Päivi Reijonen).



Fig. 5.19. Dogo argentino. (Photograph by: Christian Pinatel de Salvator).

dogs must undergo obedience training.¹⁴⁸ The AVA is presently in the process of compiling a list of insurance companies and accredited trainers.¹⁴⁹

Part II of the Second Schedule lists breeds which are not banned but are subject to heavy ownership restrictions. They are the bull terrier (Fig. 5.21), the Doberman pinscher (Fig. 5.22), the rottweiler (Fig. 5.23), the German shepherd dog (Fig. 5.24) (and related breeds like the Belgian shepherd dog and the East European shepherd dog) and their crosses. All Part II dogs must be microchipped.¹⁵⁰ The same requirements of taking out an insurance policy, banker's guarantee, and obedience training for Part I dogs apply to Part II dogs licensed on or after 15 Nov.2010.¹⁵¹ However, Part II dogs need not be sterilised and the quantum of the banker's guarantee is lower at \$2,000.¹⁵²

¹⁴⁸ Ibid., rule 8(1)(e).

¹⁴⁹ "Dogs on AVA list can do serious harm in an attack", Letter to Forum, *The Sunday Times* (19 Dec.2010) 34.

¹⁵⁰ *Dog Licensing Rules*, supra note 126, rule 8(2)(a).

¹⁵¹ Ibid., rules 8(2)(a) to (d).

¹⁵² Ibid., rule 8(2)(c).



Fig. 5.20. Fila Brasileiro. (Photograph by: H. Luebner).



Fig. 5.21. Bull terrier. (Photograph by: Phoebedslr).

Rule 8(3) of the *Dog Licensing Rules* provides that the Director-General has discretion to extend these requirements to a non-specified breed of dog, such as a dog which has bitten another dog or a person.¹⁵³ The penalty for breaching these rules is a fine of not more than \$5,000.¹⁵⁴

Stray dogs. — Rule 13(1) of the *Dog Licensing Rules* states that the Director-General can issue a direction to the owner or occupier of any premises to “remove any stray dog found in the premises” and to adopt measures necessary to keep the animal away from entering, having shelter or breeding in the premises. Persons who fail to comply with such directives will be subject to a fine of up to \$5,000.¹⁵⁵

Pets in HDB flats. — The *Housing and Development (Animals) Rules*¹⁵⁶ [*HDB Animals Rules*] provides that no cats or dogs (other than the approved breeds) may be kept or allowed to be kept within Housing and Development Board (HDB) property.¹⁵⁷ These rules override tenancy, licence

¹⁵³ Ibid., rule 8A(1)(4)(a).

¹⁵⁴ Ibid., rule 16.

¹⁵⁵ Ibid., rule 16.

¹⁵⁶ Cap. 129, R. 4, 1990 Rev. Ed. Sing. [*HDB Animals Rules*].

¹⁵⁷ Ibid., rule 3(1).



Fig. 5.22. Doberman pinscher. (Photograph by: Liliana Martinez J.).



Fig. 5.23. Rottweiler.
(Photograph by:
Robotti Daniele).



Fig. 5.24. German shepherd. (Photograph by: Flaurentine).

or lease agreements concerning the property or any express or implied consent given by the HDB. Rule 3(2) further adds that only one dog may be kept.

The list of approved dog breeds consists of toy dog breeds such as the miniature schnauzer and papillon, and it may be viewed online on the HDB InfoWEB.¹⁵⁸ It should be noted, however, that the list on the InfoWEB contains 14 more breeds than that in the Schedule of the *HDB Animals Rules*. This discrepancy probably arose because the subsidiary legislation has not been updated since 1992.

Rule 4 states that “any licensee, tenant or owner” of the residential HDB property should not deny a HDB officer entrance to their premises to determine if a cat or dog is being kept, and if it were a dog, the specific breed and numbers. The penalty for non-compliance with rules 3 or 4 is a fine of up to \$4,000.¹⁵⁹

The rules do not elaborate on the kinds of pet animals that may be kept in HDB flats. However, the HDB InfoWEB states that “HDB allows flat owners to keep other pet animals such as fish, hamsters, rabbits and birds” which “do not cause nuisance to neighbours and do not disturb the environment”.¹⁶⁰

The notion of causing nuisance is often used to explain the ban on keeping cats in HDB flats. In a 2002 parliamentary debate, the then Minister of State, Vivian Balakrishnan, explained that feline behaviour, such as being “nomadic by nature”, not taking “kindly to a leash”, “def[a]ecation or urinary habits which may aggravate neighbours” and the loud caterwauling during mating rituals, make them unsuitable for habitation in HDB flats.¹⁶¹ However, Balakrishnan did not rule out the possibility of lifting the ban in the future and stated that HDB would have to assume a balanced approach towards resolving these differences among the various stakeholders.

The last time stray cats were allowed in HDB estates was between 1998 and 2003 when the Stray Cat Rehabilitation Scheme was carried out. Volunteers sterilised stray cats and fed them in “an organised and hygienic way”.¹⁶² It was thought that this scheme would manage the stray cat population because the presence of sterilised cats “deters other non-sterilised cats from settling in”.¹⁶³ Unfortunately, that the scheme was subsequently terminated in 2003 because “a) food left behind by feeders has led to pest problems; b) cat def[a]ecation in common areas dirtied the environment; c) Town Councils have had to clean up food and cat wastes; d) number of stray cats and complaints about cats has not been reduced, and in some areas, actually increased”.¹⁶⁴

¹⁵⁸ HDB InfoWEB, *Breeds of Dogs Allowed*, online: <<http://www.hdb.gov.sg/fi10/fi10326p.nsf/w/PetBreedsAllowed>>.

¹⁵⁹ *HDB Animals Rules*, supra note 156, rule 5.

¹⁶⁰ HDB InfoWEB, *Types of Pets Allowed*, online: <<http://www.hdb.gov.sg/fi10/fi10326p.nsf/w/PetTypesOfPetsAllowed?OpenDocument>>.

¹⁶¹ Sing., *Parliamentary Debates*, vol. 75, col. 109 at 122 (8 Jul.2002) (Dr Vivian Balakrishnan).

¹⁶² Sing., *Parliamentary Debates*, vol. 72, col. 331 at 331 (23 May 2000) (Dr John Chen Seow Phun).

¹⁶³ Ibid. at col. 331–332.

¹⁶⁴ AVA, Press Statement, “Discontinuation of the Stray Cat Rehabilitation Scheme (SCRS) in Public Housing Estates” (8 Oct.2003), online: Agri-food and Veterinary Services <http://www.ava.gov.sg/NR/rdonlyres/EF6ACC25-AA2C-49C2-ABB2-FA997C95B82D/121_68/attach49.pdf>.

Meanwhile, the AVA has been controlling the stray cat population by culling. In 2010 alone, some 5,100 stray cats were culled.¹⁶⁵ This approach has been criticised by animal welfare groups who argue that the culling has been done indiscriminately on even community cats which are sterilised.¹⁶⁶ They have called for a more humane arrangement known the Trap-Neuter-Release-Management method which appears to employ the same principles as the abovementioned Stray Cat Rehabilitation Scheme.

Recently, the Minister for National Development Khaw Boon Wan revealed that he called on the AVA to seriously review its culling programme because “killing [stray cats] is not the best way to go”.¹⁶⁷ The Minister has since appointed the current Acting Minister for Manpower and Senior Minister of State for National Development Tan Chuan-Jin to engage the “AVA, the relevant NGOs and interested residents to forge a compassionate and mature approach to this problem”.¹⁶⁸ On 11 Jul.2011, Tan Chuan-Jin announced that the AVA, the Cat Welfare Society, and four town councils were restarting the Stray Cat Rehabilitation Programme in Sembawang-Nee Soon, Tampines, Ang Mo Kio, and Marine Parade constituencies and that the authorities were reviewing pet ownership and stray animal management policies.¹⁶⁹ In Oct.2012, it was reported that under a two-year pilot scheme, HDB residents in Chong Pang constituency would be allowed to keep one cat per flat, provided that they comply with certain requirements, including registration with the Cat Welfare Society and adherence to a Code of Responsible Behaviour.¹⁷⁰

Endangered species. — See the next section on importing and exporting endangered species.

Reptiles. — The First Schedule of the *WALO* does not list reptiles, thus strictly speaking, the law is unclear on whether reptiles can be kept as pets. Lye Lin Heng has suggested that by applying the statutory interpretation canon *expressio unius est exclusio alterius*, reptiles are excluded since licences for keeping reptiles may never be obtained.¹⁷¹ Indeed, as Lye also highlighted, commercial crocodile farms are licensed separately under a different subsidiary legislation.¹⁷² Today, these commercial farms are licensed under the *Animals and Birds (Licensing of Farms) Rules*.¹⁷³

However, the argument that reptiles cannot be kept as pets leads to a rather curious situation. First, in practice, birds may be reared without licences even though there is no equivalent regulation under the *WABA*. Secondly, the red-eared slider (*Trachemys scripta elegans*; Fig. 5.25) and the Malayan box turtle (*Cuora amboinensis*; Fig. 5.26) are reptiles which have been expressly permitted by the AVA to be kept as pets without licences.¹⁷⁴ Thirdly, an argument might be made

¹⁶⁵ Amanda Feng, “HDB to look into the possibility of allowing cats in flats” *TODAYonline* (4 Jun.2011) (Factiva).

¹⁶⁶ Tan Dawn Wei, “Suffer the little critters” *The Sunday Times* (21 Jun.2009) (Factiva).

¹⁶⁷ Khaw Boon Wan, “Saving Cats” (3 Jun.2011), online: *Housing Matters* <<http://mndsingapore.wordpress.com/2011/06/03/saving-cats>>.

¹⁶⁸ *Ibid.*

¹⁶⁹ Janice Tai, “Task force to review pet ownership policies” *The Straits Times* (12 Jul.2011) (Factiva).

¹⁷⁰ Melody Zaccheus, “Cats in HDB flats under pilot scheme” *The Straits Times* (21 Oct.2012) (Factiva).

¹⁷¹ Lye, “Wildlife Protection Laws”, *supra* note 29 at 310.

¹⁷² *Ibid.*

¹⁷³ Cap. 7, R. 3, 2004 Rev. Ed. Sing.

¹⁷⁴ The AVA website states that the following animals can be sold in a licensed pet shop: dog, cat, rabbit, guinea pig, hamster, gerbil, mouse, chinchilla, red-eared slider, birds (those listed under CITES must have papers), fish (those listed under CITES must have papers), land hermit crab (*Coenobita rugosus*), green tree frog (*Litoria caerulea*), and

that carnivorous reptiles, such as snakes, should be included under category (c) of the *WALO* list of wild animals. Category (c) reads “[c]arnivores, including tigers, lions, leopards, panthers, jaguars, pumas, cheetahs, wild cats, jackals and hyenas, but excluding domesticated cats and dogs”.¹⁷⁵ However, the statutory rule of *ejusdem generis* is likely to apply such that the meaning of “carnivore” is limited by the group or list of specific words which follow it.¹⁷⁶ In this context, the meaning of “carnivore” is likely to be confined to only mammals. This appears to be how the AVA interprets the provision; in one of AVA’s letters to the forum, it clarified that category (c) applied to only “big mammals”.¹⁷⁷



Fig. 5.25. Red-eared slider (*Trachemys scripta elegans*). (Photograph by: Kelvin Lim).

Malayan box turtle (*Cuora amboinensis*). See: <<http://www.ava.gov.sg/AnimalsPetSector/SalesOfPetsOwnershipExhib/PetShops/index.htm#animals>>.

¹⁷⁵ *WALO*, supra note 69, First Schedule.

¹⁷⁶ Beckman, Coleman & Lee, supra note 10 at 350–351.

¹⁷⁷ AVA, “Sharks OK in Condominium”, supra note 80.



Fig. 5.26. Malayan box turtle (*Cuora amboinensis*). (Photograph by: Norman Lim).

The same forum letter also explained that the AVA may consider allowing non-traditional pets such as snakes and iguanas to be imported in commercial numbers if these animals are subsequently deemed suitable for the pet trade.¹⁷⁸ Such decisions are made using factors such as “animal health and welfare, environmental impact, public safety, and whether they are endangered species.”¹⁷⁹ This statement clarifies that snakes and iguanas are currently not allowed to be kept as pets. Nevertheless, it remains unclear if other reptiles, such as turtle species that fall outside of Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES) restrictions, are permissible pets. It would be best for the AVA to clarify its policy on animals which are omitted from being expressly referred to in the *WALO*.

Other exotic pets. — In 2006, the AVA issued a letter to the Today forum page to clarify that it was not illegal for the Parc Palais condominium to keep a nurse shark and black tipped reef sharks without licences.¹⁸⁰ It took into account the fact that those sharks were not endangered species and had been imported in small numbers by local fish traders. Further, the sharks in question were in healthy condition.

While the AVA appears to have been fairly open-minded in that instance, the AVA website appears to adopt a more restrictive view towards the keeping of exotic pets. It states that exotic pets such as

¹⁷⁸ Ibid.

¹⁷⁹ Ibid.

¹⁸⁰ Ibid.



Fig. 5.27. Sugar glider (*Petaurus breviceps*). (Photograph by: Jan Tilden).

“star tortoises, iguanas, tarantulas, scorpions, snakes, salamanders, sugar gliders (Fig. 5.27), hedgehogs, slow lorises [and] gibbons” are not allowed for five reasons.¹⁸¹ They “may introduce and spread diseases to humans and domestic animals”.¹⁸² Further, the “[c]ollection of wild animals for trading will lead to ecosystem imbalance and threaten the survival of endangered species” and the animal welfare may be compromised for “reasons such as unsuitable living conditions, poor diet and pet owner’s lack of knowledge of the proper care for the animal”.¹⁸³ In addition, Singapore’s biodiversity would be undermined by the introduction of non-native species in the wild and “[i]f the animal escapes, it may cause nuisance, fear and trauma to the general public”.¹⁸⁴ Given that the website was last updated on 1 Mar.2013, this restrictive approach is more likely to represent AVA’s current stance on the issue than the approach taken in the Parc Palais case. This being said, the fact remains that the statements on the website are not legally binding. It is timely for the AVA to solidify its policies on keeping animals into subsidiary legislation.

¹⁸¹ AVA, *CITES and Endangered Species*, online: Agri-food and Veterinary Authority of Singapore <<http://www.ava.gov.sg/AnimalsPetSector/CITESEndangeredSpecies>> [AVA, *CITES and Endangered Species*].

¹⁸² Ibid.

¹⁸³ Ibid.

¹⁸⁴ Ibid.

B. TRADE IN ENDANGERED SPECIES

Introduction. — Singapore became a signatory to the CITES on 30 Nov.1986.¹⁸⁵ CITES is an international agreement between 175 countries¹⁸⁶ that regulates international trade in endangered species of wild animals and plants through a system of licences.¹⁸⁷

Under CITES, endangered species are classified into three appendices according to their level of vulnerability. Appendix I lists species which are threatened with extinction, and trade in these species is generally prohibited. Appendix II covers those endangered species which are in need of monitoring before use becomes incompatible with survival. Commercial trade in such species is permissible, though consignments must be accompanied by valid CITES permits. Finally, Appendix III caters to species which are endangered in certain countries so only specimens from those countries are protected under CITES.¹⁸⁸ Countries that placed wildlife species under the last category require the assistance of other CITES parties to control trading. Importing Appendix III species requires a Certificate of Origin, whereas exporting specimens from a country which includes the species under Appendix III requires the production of a valid CITES export permit.¹⁸⁹

After Singapore acceded to CITES, the then Primary Production Department, Trade Development Board, and the Customs and Excise Department enforced “as much of the CITES’s requirements as possible by using existing legislation such as the *Wild Animals and Birds Act*, the *Animals and Birds Act* and the *Fisheries Act*”.¹⁹⁰ However, these laws fell short of controlling trade, so in 1989 the *Endangered Species (Import and Export) Act* was passed to better achieve that aim. Subsequently, the Act was amended in 2002 to add a list of endangered species. The Act was later repealed in 2006 to accommodate the “substantive changes to the CITES enforcement obligations on member states and the interpretation of illegal trade”.¹⁹¹

The current *Endangered Species (Import and Export) Act*¹⁹² [ESA] provides AVA with more enforcement power as well as significantly stiffer penalties, and the terms and provisions are more streamlined with CITES and other statutory laws.¹⁹³ The list of CITES-protected wild fauna and

¹⁸⁵ Convention on International Trade of Endangered Species of Wild Fauna and Flora Secretariat, *List of Contracting Parties (in Chronological Order)*, online: Convention on International Trade of Endangered Species of Wild Fauna and Flora <<http://www.cites.org/eng/disc/parties/chronolo.php>>.

¹⁸⁶ Convention on International Trade of Endangered Species of Wild Fauna and Flora Secretariat, *Member Countries*, online: Convention on International Trade of Endangered Species of Wild Fauna and Flora <<http://www.cites.org/eng/disc/parties/index.php>>.

¹⁸⁷ Convention on International Trade of Endangered Species of Wild Fauna and Flora Secretariat, *What is CITES?*, online: Convention on International Trade of Endangered Species of Wild Fauna and Flora <<http://www.cites.org/eng/disc/what.php>>.

¹⁸⁸ Convention on International Trade of Endangered Species of Wild Fauna and Flora Secretariat, *How CITES works?*, online: Convention on International Trade of Endangered Species of Wild Fauna and Flora <<http://www.cites.org/eng/disc/how.php>>.

¹⁸⁹ AVA, *CITES and Endangered Species*, supra note 181.

¹⁹⁰ Sing., *Parliamentary Debates*, vol. 52, col. 561 at 562 (26 Jan. 1989) (Dr Lee Boon Yang).

¹⁹¹ Sing., *Parliamentary Debates*, vol. 80, col. 2184 at 2184 (17 Jan.2006) (Mr Heng Chee How).

¹⁹² Cap. 92A, 2008 Rev. Ed. Sing. [ESA].

¹⁹³ *Parliamentary Debates* (Mr Heng Chee How), supra note 191.

flora is available in the Schedule of the *ESA* which is accessible via the AVA's website, through the CITES database or Singapore Statutes Online.¹⁹⁴

In 2010, a group of scientists reviewed the efficacy of the current CITES measures in curbing trade in endangered species.¹⁹⁵ Several areas for improvement were highlighted in terms of data collection, data analysis, and internal and external checks and balances. In particular, it was noted that "CITES relies exclusively on country self-reporting, although incentives are high for biased analyses and misreporting, and most CITES-listed species occur in the tropics where governance is often weak and corruption high."¹⁹⁶ The commentary made a number of recommendations, including "[c]ritical, independent peer-review" among CITES parties.¹⁹⁷ While these recommendations sound plausible, changes are unlikely to be made to the *ESA* unless the CITES itself is amended.

Offences. — The main thrust of the *ESA* lies in sections 4 and 5. Section 4(1) makes it an offence to import, export, re-export¹⁹⁸, or bring in from the sea "any scheduled species without a permit."¹⁹⁹ Under section 4(2), it is an offence to possess, sell, publicly display, or advertise for sale any scheduled species which was obtained without a permit.²⁰⁰ The *ESA* defines "scheduled species" as "any animal or plant (including any readily recogni[s]able part or derivative thereof) specified in the Schedule".²⁰¹ A broad definition of the phrase "readily recogni[s]able part or derivative" is employed to include things which are claimed or appear from accompanying documents, packaging, labels or other marks to contain a part or derivative of a scheduled plant or animal.²⁰² This enables AVA to take action against fake products without having to "prove that this part or derivative is actually present in the product".²⁰³ The same penalties apply for both genuine products and fake products because the "[s]ales of fake products will damage Singapore's image as a responsible global citizen to the same extent as sales of genuine products, as the international community is quick to judge our reputation based on such claims, and the proliferation of sales of fake products produces "noise" and will complicate our effort to apprehend the genuine cases."²⁰⁴

The penalties for violating sections 4(1) or 4(2) are a maximum fine of \$50,000 per scheduled species of animals or plants seized or a jail term of up to 2 years or both.²⁰⁵ If more than one scheduled species is seized, the aggregate fine quantum shall not exceed \$500,000.²⁰⁶ During the Second Reading of the *Endangered Species (Import and Export) Bill*, one Member of Parliament

¹⁹⁴ United Nations Environment Programme World Conservation Monitoring Centre, *CITES Species Database*, online: CITES-listed species database <<http://www.cites.org/eng/resources/species.html>>.

¹⁹⁵ Jacob Phelps et al., "Boosting CITES" (2010) 330(6012) *Science* 1752–1753 at 1752.

¹⁹⁶ *Ibid.* at 1753.

¹⁹⁷ *Ibid.*

¹⁹⁸ *ESA*, supra note 192, section 2 (exporting previously imported scheduled species).

¹⁹⁹ *Ibid.*, section 4(1).

²⁰⁰ *Ibid.*, section 4(2).

²⁰¹ *Ibid.*, section 2.

²⁰² *Ibid.*

²⁰³ *Parliamentary Debates* (Mr Heng Chee How), supra note 191.

²⁰⁴ *Ibid.*

²⁰⁵ *ESA*, supra note 192, sections 4(1) and 4(2).

²⁰⁶ *Ibid.*

Amy Khor questioned the need for capping the maximum aggregate fine at \$500,000 given that the illegal wildlife trade is a multi-million dollar business.²⁰⁷ She noted that it was tantamount to “limit[ing] the financial risk” for these illegal traffickers.²⁰⁸ In response, the Minister of State in-charge of the Bill, Heng Chee How, cited the example of Hong Kong legislation which similarly imposed a maximum fine of HK\$5 million and two years’ jail term.²⁰⁹ Although benchmarking penalties to those in other countries is not unreasonable, it is submitted that Khor’s observation remains valid and the issue remains as to whether the ceiling should be raised. Thus far none of the reported seizures in Singapore have exceeded the \$50,000 mark for each species seized. The penalties also apply equally to individuals who abetted or attempted to commit the offences.²¹⁰ Subject to the discretion of the Director-General, some of these offences may be compounded with a sum of not more than \$5,000.²¹¹

Section 5(1) of the *ESA* prohibits illegal transshipments²¹² by requiring that all scheduled species in transit in Singapore must have a valid CITES export or re-export permits from the country of export or re-export and the country of import or final destination. This provision was introduced in recognition of Singapore’s position as “an attractive transshipment hub”.²¹³ It applies to “both travellers and cargoes passing through Singapore” and allows the AVA to “act decisively upon receiving strong intelligence and evidence and tip-offs of illegal CITES-protected species being transshipped through Singapore and prevent Singapore from being used as a conduit for the smuggling of CITES-protected species”.²¹⁴

An owner, importer, exporter or re-exporter of an unlicensed scheduled species in transit in Singapore will be liable on conviction to a maximum fine of \$50,000 per species (capped at an aggregate of \$500,000 if more than one species is seized) or a jail term of up to 2 years or both.²¹⁵ Animals and plants seized pursuant to offences under sections 4 or 5 or whose owner, importer, exporter or re-exporter cannot be determined or is not in Singapore will be forfeited by the Director-General.²¹⁶ The penalties apply equally to individuals who abet or attempt to commit these offences.²¹⁷

The *ESA* provides for two possible defences to offences under sections 4 and 5. The first defence is that the offence arose from an “act or default of another person” or “some other cause beyond his control”.²¹⁸ However, if the accused relies on the act or default of another person, he must give the

²⁰⁷ Sing., *Parliamentary Debates*, vol. 80, col. 2184 at 2189–2190 (17 Jan.2006) (Dr Amy Khor) (“If these illegal traffickers continue to commit such offences, despite the hefty penalties, why should the law help limit the financial risk they face upon prosecution?”).

²⁰⁸ *Ibid.*

²⁰⁹ *Parliamentary Debates*, (Mr Heng Chee How), *supra* note 191 at 2195.

²¹⁰ *ESA*, *supra* note 192, section 19.

²¹¹ *Ibid.*, section 25.

²¹² It should be noted that the word “transship” and its derivatives are spelled as “tranship” and its respective derivatives in the *Animals and Birds Act*, *infra* note 344, and *Control of Plants Act*, *infra* note 487.

²¹³ *Parliamentary Debates* (Mr Heng Chee How), *supra* note 191 at 2195.

²¹⁴ *Ibid.*

²¹⁵ *ESA*, *supra* note 192, section 5(2).

²¹⁶ *Ibid.*, sections 15(1) and 15(3).

²¹⁷ *Ibid.*, section 19.

²¹⁸ *Ibid.*, section 6(1)(a).

Prosecutor notice of this person's identity within seven complete days before the hearing.²¹⁹ The second defence is contingent on the accused proving that the offence arose despite him taking "all reasonable precautions" and exercising "due diligence to avoid the commission of such offence by himself or any other person under his control".²²⁰ Thus far, there have not been any reported cases which deployed these defences.

At this juncture, it would be useful to consider some of the seizures and cases under the *ESA*. The AVA has prosecuted cases involving scheduled species being kept as pets. In *Public Prosecutor v. Kuah Kok Choon*,²²¹ the accused was convicted for possession of two Lear's macaws (*Anodorhynchus leari*; an Appendix I species; Fig. 5.28) without an import permit. The accused argued that he imported the birds before the *ESA* came into force and therefore did not need to acquire an import permit. This argument was rejected by Chief Justice Yong Pung How (as he then was) who clarified that since the offence under section 4(2) pertained to "possession rather than to import", so long as the accused had possession of the birds after the *ESA* came into operation, the charge was proven.²²² The then Chief Justice Yong also stated that the burden of proving that proper import permits were obtained rests on the party who possesses, controls, sells, offers to sell or displays in public the birds.²²³ At the time of the offence, the maximum fine was \$10,000. When sentencing the accused, the then Chief Justice Yong took into account the fact that this was the accused's second *ESA* offence and that each Lear's macaw was worth more than the then maximum fine and imposed the maximum one-year jail term and \$10,000 fine, with 6 months' imprisonment in default thereof.²²⁴



Fig. 5.28. Lear's macaws (*Anodorhynchus leari*). (Photograph by: [Ciro Albano](#)).

²¹⁹ *Ibid.*, section 6(2).

²²⁰ *Ibid.*, section 6(1)(b).

²²¹ [2000] SGHC 244; [2000] 3 Sing. L.R. (R.) 752.

²²² *Ibid.* at para. 19.

²²³ *Ibid.*

²²⁴ *Ibid.* at para. 31.

Some seizures have taken place at custom checkpoints. For instance, in 2006, a Singaporean was arrested at Changi Airport for attempting to smuggle 11 blue-eyed cockatoos (*Cacatua ophthalmica*) and one black-capped lory (*Lorius lory*) (both are Appendix II species) in his luggage.²²⁵ Another returning Singaporean was arrested at Changi Airport with 83 wild orchid plants belonging to 24 species (including *Dendrobium brymerianum*, *Dendrobium pachyphyllum* and other Appendix II species).²²⁶ In *Public Prosecutor v. Sustrisno Alkaf*,²²⁷ the AVA seized a shipment of more than 2,525 soft-shell turtles (an Appendix II species) that was transshipping in Singapore. The accused captain produced a fake CITES permit for 1,800 Asian box turtles (a non-scheduled species) to the AVA officials who dealt with him. He was sentenced to five months of imprisonment and a further two months of imprisonment in lieu of the \$20,000 fine imposed. The judge had “imposed a substantial custodial sentence to meet the needs of general deterrence” because this was an offence which was “difficult to detect or investigate without information provided to the enforcement agencies”.²²⁸ It is interesting to note that the court stated that even though these turtles were classified under the Appendix II, it did not result in “any less imperative to conserve such species, nor in any way lessen the public interest in imposing a stiff sentence”.²²⁹ Moreover, the substantial number of turtles involved suggested that it had been “a significant commercial operation”.²³⁰

In Oct.2010, the Straits Times reported that the AVA and Animal Concerns Research and Education Society (ACRES) engaged in undercover operations to seize a porcupine and tiger pelt (suspected fakes).²³¹ These items had been advertised openly on online listings, despite the strict ban against selling tiger products under the *ESA* and the *Endangered Species (Import and Export) (Prohibition of Sale) Notification*.²³²

Under section 2 of the *Endangered Species (Import and Export) (Prohibition of Sale) Notification [Prohibition of Sale Notification]*, individuals are prohibited from selling, offering or exposing for sale or publicly displaying certain “readily recognisable parts and derivatives” from all species of rhinoceros (*Perissodactyla rhinocerotidae*) and the tiger (*Panthera tigris*). These prohibited parts and derivatives are the rhinoceros horn (including powder and waste), rhinoceros meat, “substantially complete” or segments of the dead rhinoceros specimens in “natural form, stuffed, chilled, preserved, dried or otherwise treated”, tiger meat, and “substantially complete” or segments of dead tiger specimens such as “teeth, claws, skin, bones (either in natural form or otherwise treated or prepared which may or may not be contained in preparations)”.²³³ Although the *Prohibition of Sale Notification* does not specify the penalties for breaching its provisions, it appears likely that section 4(3) of the *ESA* applies because that provision is targeted at gazetted scheduled species.²³⁴ Under section 4(3), the penalties are a fine of not more than \$10,000 per species (capped at an aggregate of \$100,000 if more than one species is seized) or to a jail term of

²²⁵ Shefali Srinivas, “Man caught at airport with 12 rare birds” *The Straits Times* (16 Feb.2006) (Factiva).

²²⁶ TRAFFIC, *TRAFFIC Bulletin Seizures and Prosecutions: Vol. 16 No. 3 (Mar.1997) to Vol. 23 No. 2 (Apr.2011)*, online: <http://www.traffic.org/traffic-bulletin/traffic_bulletin_seizures_1997-onwards.pdf> at 104.

²²⁷ [2006] SGDC 182.

²²⁸ *Ibid.* at para. 43.

²²⁹ *Ibid.* at para. 41.

²³⁰ *Ibid.* at para. 37.

²³¹ Grace Chua, “‘Tiger pelt’ and hedgehog for (illegal) sale” *The Straits Times* (1 Oct.2010) (Factiva).

²³² Cap. 92A, N. 1, 2008 Rev. Ed. Sing. [*Prohibition of Sale Notification*].

²³³ *Ibid.*, Second Column of the Schedule.

²³⁴ The writers are grateful to Lye Lin Heng for sharing her insight on this point.

up to 12 months or both, and they are less severe than those under section 4(2) of the *ESA*. At first glance, this appears to be rather odd because both the *Panthera tigris* and *Perissodactyla rhinocerotidae* (other than the *Ceratotherium simum simum* sub-species) are Appendix I species for which sale or display to public should be liable to the higher penalty under section 4(2) of the *ESA*. To date, the legislative intent behind section 4(3) of the *ESA* has not been clarified. Perhaps, in order to give effect to section 4(2) and further its goals of deterrence and preservation of highly endangered Appendix I species, section 4(3) should only apply to *Panthera tigris* and *Perissodactyla rhinocerotidae* specimens which were not imported or introduced from the sea without proper import and export permits.

Permits. — CITES permit matters are covered under sections 7 and 8 of the *ESA*. Individuals who are interested in importing, exporting, re-exporting or bringing in from the sea any scheduled species must obtain a permit from the Director-General of Agri-food and Veterinary Services.²³⁵ The Director-General may grant permits or permission unconditionally or conditionally, or refuse to grant such permit or permission at all.²³⁶ Even when the permit is granted, it may subsequently be cancelled if the Director-General finds that a condition was violated or that the permit was issued as a result of a “misrepresentation of a material fact”.²³⁷ Once cancelled, the permit holder will be immediately notified²³⁸ and if he fails to relinquish the permit “without reasonable excuse”, he shall be said to have committed an offence.²³⁹ Since section 8 does not provide the penalty for doing so, recourse shall be had to the general penalty provision of the *ESA* which prescribes a maximum fine of \$10,000, a jail term of up to 12 months or both.²⁴⁰

Enforcement powers. — The *ESA* grants fairly broad powers of enforcement to authorised officers, namely police officers, customs officers, or other authorised public officers.²⁴¹ These include the power to inspect premises, documents, and items that he reasonably believes relate to the *ESA* provisions²⁴², the power to investigate and require information from relevant individuals²⁴³, the power of entry into suspect premises without warrant²⁴⁴ and that to “seize, remove and detain” any scheduled species, its receptacle and its food and drink found on such premises²⁴⁵. Additionally, section 14(1) provides that individuals who are committing or attempting to commit any offence under the *ESA* may be arrested without warrant.

Enforcement activity is further bolstered by sections 16 and 17. Individuals who hinder the work of the Director-General or authorised officers²⁴⁶ or fail to provide all necessary assistance as requested

²³⁵ *ESA*, supra note 192, section 7(1).

²³⁶ *Ibid.*, section 7(2).

²³⁷ *Ibid.*, section 8(1).

²³⁸ *Ibid.*, section 8(2).

²³⁹ *Ibid.*, section 8(4).

²⁴⁰ *Ibid.*, section 18.

²⁴¹ *Ibid.*, section 2.

²⁴² *Ibid.*, section 9.

²⁴³ *Ibid.*, section 10.

²⁴⁴ *Ibid.*, section 11(1)(a).

²⁴⁵ *Ibid.*, section 11(1)(c).

²⁴⁶ *Ibid.*, section 16(a).

by the authorities “without reasonable excuse” are guilty of offences.²⁴⁷ Other offences include adducing false declarations and presenting fake licences and permits to the authorities when a person knows or has reasons to believe it is false²⁴⁸, as well as unlawful modification and disfigurement of a permit, or the use of such a permit.²⁴⁹ The penalties for breaching sections 16 and 17 are a fine of up to \$10,000 or a jail term of up to 12 months or both.²⁵⁰

C. ANIMAL PROTECTION LAWS

Introduction. — Section 5 of the *WABA* protects all wild animals and birds (other than the six species of birds)²⁵¹ from being killed without a licence. The penalty on conviction is a fine of up to \$1,000 and forfeiture of the wild animal or bird.²⁵² The Director-General of Agri-food and Veterinary Services or an authorised officer may compound the offence by collecting up to \$500 from a person who has been reasonably suspected of committing the offence.²⁵³

Members of the public can inform the AVA of any suspected poaching activities at a special hotline.²⁵⁴ Under section 13 of the *WABA*, “[t]he court may direct any fine or any portion of any fine imposed or levied under this Act to be paid to the informer.”

The Director-General of the Agri-food and Veterinary Services or the Commissioner of Police may grant licences to individuals for “shooting or taking any wild animal or bird”.²⁵⁵ For instance, the culling of house crows is performed by volunteers from the Singapore Gun Club and the private security firm, Cisco, which is contracted with the NEA.²⁵⁶

Section 6(1) of the *WABA* allows an “occupier or person in charge of any land to kill or take any wild animal or bird found damaging or destroying the crops or any other property thereon”. The person who claims the damage or loss must bear the burden of proof.²⁵⁷ Section 6 appears to be based on section 3 of the *1904 Ordinance* which had been designed to exempt crop-growing land owners or occupiers from liability when they caught or killed pest animals or birds destroying their

²⁴⁷ *Ibid.*, section 16(b).

²⁴⁸ *Ibid.*, section 17(1).

²⁴⁹ *Ibid.*, section 17(2).

²⁵⁰ *Ibid.*, section 18.

²⁵¹ See note 62.

²⁵² *WABA*, supra note 63, section 5.

²⁵³ *Wild Animals and Birds (Composition of Offences) Order 2005*, supra note 65.

²⁵⁴ Hotline number: 6227 0670. Callers should provide the following information: (1) type of animals poached; (2) location of the animal poaching activity; (3) frequency of poaching; (4) description of accompanying vehicles used for the activity (model, colour, licence number); (5) other useful information (photographs, equipment used for poaching, poacher’s description); and (6) contact details of informant. AVA, *CITES and Endangered Species*, online : Agri-food and Veterinary Authority of Singapore <<http://www.ava.gov.sg/AVA/Templates/AVA-GenericContentTemplate.aspx?NRMODE=Published&NRNODEGUID=%7b1ED3D89F-2AF7-496E-BBFA-EB16CAE9B95C%7d&NRORIGINALURL=%2fAnimalsPetSector%2fCITESEndangeredSpecies%2f&NRCACHEHINT=Guest#poaching>>. Note, however, that this is not a 24-hour hotline. ACRES provides a 24-hour Wildlife Rescue Hotline (number: 9738 7782).

²⁵⁵ *WABA*, supra note 63, section 7(1).

²⁵⁶ Navjot S. Sodhi & Ilsa Sharp, supra note 84 at 48.

²⁵⁷ *WABA*, supra note 63, section 6(2).

crops. Thus, apart from the small number of farms in Singapore, the exact scope of this defence remains unclear. For instance, should the defence be invoked if a bird eats the plants growing in the garden of residential property? It is suggested that it should not because such a wide reading would undermine the protection conferred to wild animals and birds under section 5 of the *WABA*. A further question remains as to whether the phrase “any other property thereon” refers to immovable property (land) or movable property or both. It is submitted that it should refer to immovable property, including telephone cable wires and trees, because such a reading would accord with the nature of crops being part of the land (immovable property). Even if this interpretation is not correct, it should be recognised that killing or taking away these animals may not be the solution to the problems encountered. Indeed, “[k]illing is particularly ineffective when dealing with very large populations” which reproduce frequently.²⁵⁸

The Minister for National Development has the power to make certain orders in respect of particular wild animal or bird species.²⁵⁹ These include orders to declare time periods to abstain from killing or taking²⁶⁰ and breeding seasons;²⁶¹ orders to prohibit killing or taking²⁶² and netting, snaring or taking;²⁶³ and orders to provide for control, registration and licensing of any species of wild animal or bird.²⁶⁴ The penalty for violating these orders is a fine up to \$1,000 and forfeiture of the wild animals or birds on conviction.

Although no such order has been passed under the *WABA*, it is useful to understand the ways in which they could be violated. For instance, section 8(b) prohibits killing, destroying, taking or having possession of the protected wild animal or bird (or its eggs) during the protected period²⁶⁵ or declared breeding season. Section 8(c), which bans the killing or taking of any wild animal or bird that is protected under the *WABA*, appears to overlap with the more general section 5 of the *WABA*. It is suggested that it may override licences which are issued earlier to kill or take certain wild animals and birds. After all, the penalty under section 8(c) is identical to that in section 5 of the *WABA*.

Use of traps. — Section 9 of the *WABA* prohibits setting or preparing “any spring gun, engine, pitfall, sharpened stake or other contrivance” that has the potential to harm human life or cause grievous hurt (Figs. 5.29, 5.30). Such contraptions may be used to destroy “some noxious creature” but only when permitted in writing by the Director-General or the Commissioner of Police. A convicted offender will be liable to a fine of up to \$1,000 or a jail term of not more than six months or both. The Director-General of the Agri-food and Veterinary Services or an authorised officer may compound the offence by collecting up to \$500 from a person who has been reasonably suspected of committing the offence.²⁶⁶

²⁵⁸ Sodhi & Sharp, *supra* note 84 at 98.

²⁵⁹ *WABA*, *supra* note 63, section 3.

²⁶⁰ *Ibid.*, section 3(a).

²⁶¹ *Ibid.*, section 3(b).

²⁶² *Ibid.*, section 3(c).

²⁶³ *Ibid.*, section 3(d).

²⁶⁴ *Ibid.*, section 3(f).

²⁶⁵ *Ibid.*, section 8(a).

²⁶⁶ *Wild Animals and Birds (Composition of Offences) Order 2005*, *supra* note 65.



Fig. 5.29. Illegal wild boar trap found on Pulau Ubin. (Photograph by: Ben Lee, Nature Trekker Singapore).



Fig. 5.30. Illegal wild boar trap found on Pulau Ubin. (Photograph by: Ben Lee, Nature Trekker Singapore).

The wording of section 9 does not appear to make it an offence to possess or set up a trap which does not lead to grievous hurt or endangerment of human lives. This is slightly problematic. However, as Lye Lin Heng noted, the setting up of any trap could be construed as an attempt to take the animal or bird within section 511 of the Penal Code and thus renders the individual liable for the same penalties under section 5 of the WABA.²⁶⁷ On a related note, C. J. Hails recommended that it should be an offence to possess or sell (in addition to setting up) bird traps, because “some of these [are] cruel” and the mere possession of traps signifies “an intention to flout the laws as all birds are protected”.²⁶⁸ Presumably, this recommendation must now be read to exclude the six unprotected bird species.

In Jun.2011, the Straits Times reported that large traps were found in the forested regions of northern Singapore.²⁶⁹ They are believed to have been set up by groups of men to catch wild boar for food, although to date, these individuals have not been arrested.²⁷⁰ To make matters worse, the traps have been maiming stray dogs, monkeys, and even endangered species such as pangolins.²⁷¹ Previously, in Jun.2009, a sub-contractor fractured his foot when he fell into a carefully concealed three-metre-deep pit in Lim Chu Kang. A few weeks later, a stray dog was suspected to have its right hind leg severed by “a trap with metal-toothed jaws”.²⁷² A letter to the Straits Times Forum, which considered such traps to be hazardous soldiers undergoing training nearby, called for the banning of “such a crude and dangerous metal trap”.²⁷³ Based on these descriptions, the traps are very likely to be prohibited by section 9 of the WABA. The problem thus appears to be one of law enforcement.

In terms of law enforcement, “the Singapore Land Authority regularly patrols vacant state land for illegal traps” and sends those conducting illicit activities to the police.²⁷⁴ However, given that the law enforcement officer must have seen²⁷⁵ the act of setting or placing or preparing the trap before he can arrest the offender without a warrant, what happens if these trap setters are not caught in the act? It is suggested that section 9 could do better at addressing the problem of illegal trapping by being extended to banning the possession of such dangerous contraptions. A complete ban on the sale and possession of all traps, including those which neither endanger lives nor cause grievous hurt to people, would be over-inclusive and needs to be reconciled with the right to defend property as accorded by section 6 of the WABA, and vector and pest control regulations.

Enforcement powers. — Under section 12(1) of the WABA, any police officer, customs officer or other authorised officer is empowered to “stop and arrest without warrant any person who within his view commits an offence” under this Act or its subsidiary legislation. However, this person shall

²⁶⁷ Lye, “Wildlife Protection Laws”, supra note 29 at 303.

²⁶⁸ Hails, supra note 66.

²⁶⁹ Judith Tan, “Illegal wild boar traps maiming stray dogs” *The Straits Times* (13 Jun.2011) (Factiva).

²⁷⁰ Ibid.

²⁷¹ Ibid.

²⁷² Lisabel Ting, “Wild boar: Eating is OK, trapping isn’t” *The Sunday Times* (12 Jul.2009) (Factiva) [Lisabel Ting, “Wild boar”].

²⁷³ Bennie Cheok, Letter to Forum, *The Straits Times* (2 Jul.2009) (Factiva).

²⁷⁴ Lisabel Ting, “Wild boar”, supra note 272.

²⁷⁵ Section 12(1), WABA (“within his view”). See the following sub-section on “Enforcement Powers”.

not be arrested if the officer is satisfied as to the person's name and residence in Singapore and that he does not intend to abscond.²⁷⁶

Lye Lin Heng has highlighted that the use of the phrase "within his view" is problematic because older Indian case authorities have indicated that it "require[s] the officer to actually see the person in the act of committing the offence".²⁷⁷ More recently, the High Court in *Chee Siok Chin & Others v Minister for Home Affairs & Another*²⁷⁸ considered the phrase "in his view" in the context of the *CPC*. The court opined that a "more generous" interpretation that the person who "does not actually witness the commission of the offence, [but] is in such close proximity that he [was] certain that an offence was committed" would be "more consistent with the intent and policy" behind that statutory provision.²⁷⁹ Regardless of how the phrase should be interpreted, it is submitted that it would be better if section 12(1) is worded more similarly to section 9(1)(e) of the *Parks and Trees Act [PTA]* which prohibits the mere possession of any explosive, net, trap, or hunting device in national parks and nature reserves.

It is suggested that the *WABA* should be amended to reflect similar powers of arrest.²⁸⁰ At the very least, wider powers should be available for *WABA* offences that are similar to those under the *Penal Code*. For instance, the offence of causing "mischief by killing, poisoning, maiming or rendering useless" animals is similar to section 5 of the *WABA* in that both provisions deal with the killing of animals.²⁸¹ Yet, the former offence is arrestable without warrant but the latter is not. If *WABA* provisions are amended, it might help to overcome the "limited efficacy" of the informers' reward.²⁸²

Marine wildlife. — The *Fisheries Act*²⁸³ regulates fishing activities and the fishing industry of Singapore. Section 2 defines "fish" to encompass "any of the varieties of marine, brackish water or fresh water fishes, crustacea, aquatic mollusca, turtles, marine sponges, trepang²⁸⁴ and any other form of aquatic life and the young and the eggs thereof". It is the only other law apart from the *PTA*²⁸⁵ which confers some degree of protection on the marine wildlife of Singapore that protects "animals" (including fish such as shellfish) found inside national parks and nature reserves.

Sections 10 to 12 of the *Fisheries Act* provide a list of offences. Section 10(1) makes it an offence to use explosive substances and poisons to "stupefy, poison or kill fish".²⁸⁶ It is also an offence for a person to be found in possession of fish caught through such means and who fail to satisfactorily explain how he came into possession of such fish.²⁸⁷ The rules provide for a rebuttable presumption

²⁷⁶ *Ibid.*, section 12(2).

²⁷⁷ Lye, "Wildlife Protection Laws", *supra* note 29 at 306–307, footnote 126.

²⁷⁸ [2006] 1 Sing.L.R.(R). 582.

²⁷⁹ *Ibid.* at para. 91.

²⁸⁰ Lye, "Wildlife Protection Laws", *supra* note 29 at 307.

²⁸¹ *CPC 2010*, *supra* note 20, First Schedule.

²⁸² Lye, "Wildlife Protection Laws", *supra* note 29, at 307.

²⁸³ Cap. 111, 2002 Rev. Ed. Sing.

²⁸⁴ The term 'trepang' originates from the Malay language and refers to sea cucumbers. *The New Oxford Dictionary of English*, 1998, s.v. "trepang".

²⁸⁵ *Supra* note 113, section 2.

²⁸⁶ *Fisheries Act*, *supra* note 283, section 10(1).

²⁸⁷ *Ibid.*, section 10(2).

that an individual found in the vicinity shortly after such an explosive or poisonous substance was used is the offender.²⁸⁸ Further, “[a]ny person in a fishing boat who is found to be in possession or control of any poisonous or explosive substance without a licence” is also liable for an offence.²⁸⁹ Section 11 prohibits the landing or sale of illegally acquired fish (in terms of means of capture or location from which fish were obtained). Individuals who commit any of the aforementioned offences face a fine of up to \$10,000 or a jail term of up to 12 months or both.²⁹⁰

Finally, section 12(1) forbids the use of trawl-nets within the territorial waters of Singapore. Convicted offenders face a jail term of between three months and three years.²⁹¹ It is significant that rule 2 of the *Fisheries (Composition of Offences) Rules*²⁹² provides that all offences may be compounded, except the offence which disallows the use of trawl-nets and the offences under the *Fisheries (Piranha) Rules*.

Fishing. — Under the *Fisheries (Fishing Gear) Rules*²⁹³ [*Fishing Gear Rules*], all individuals who use or possess fishing gear must obtain a licence and abide by the conditions stated on the licence (Figs. 5.31, 5.32, 5.33).²⁹⁴ The licensee must also carry the licence with him at all times.²⁹⁵ Rule 2 defines “fishing gear” to include “nets, stakes²⁹⁶, traps and lines with more than 3 hooks”. Individuals who plan to use fishing stakes must seek prior permission from the Director-General of Agri-Food and Veterinary Services before a fishing licence will be issued.²⁹⁷ The licensee must also remove his fishing gear when no longer in use or when the licence is revoked or expires.²⁹⁸

D. SALE, EXPORT OR IMPORT OF ANIMALS AND BIOLOGICAL PRODUCTS

Live fish that are not intended for human consumption. — The term “live fish” is widely defined as referring to “any varieties of marine, brackish water or fresh water fishes, crustacea, aquatic mollusc, turtles, marine sponges, trepang, and any other form of aquatic life, including the young and eggs thereof, imported or exported whilst still living and not intended for human consumption”.²⁹⁹ This extends the scope of application of the above requirements more widely than the predecessor rules which only applied to ornamental fishes.³⁰⁰

²⁸⁸ Ibid., section 10(3).

²⁸⁹ Ibid., section 10(4).

²⁹⁰ Ibid., section 13(1).

²⁹¹ Ibid., section 12(2).

²⁹² Cap. 111, R. 9, 1994 Rev. Ed. Sing.

²⁹³ Cap. 111, R. 6, 1994 Rev. Ed. Sing. [*Fishing Gear Rules*].

²⁹⁴ Ibid., rule 3.

²⁹⁵ Ibid., rule 8.

²⁹⁶ *Fisheries Act*, supra note 283, section 2. (Fishing stakes are “any device used for the capture of fish which is made up of poles or other supports permanently fixed into the ground and enclosed by ramie, rattan, wire or other screening material, so designed as to lead fish into the enclosures, or any device using a net or other screening material that is anchored permanently or impermanently”.)

²⁹⁷ *Fishing Gear Rules*, supra note 293, rule 5.

²⁹⁸ Ibid., rule 7.

²⁹⁹ Ibid., rule 2. Supra note 284 for definition of ‘trepang’.

³⁰⁰ *Animals and Birds (Ornamental Fish) Rules 2002*, G.N. S 477/2002, rule 2(1).



Fig. 5.31. Fish trap being used at Cyrene Reef. (Photograph by: Ria Tan).



Fig. 5.32. Close-up of fish trap used at Cyrene Reef. (Photograph by: Ria Tan).



Fig. 5.33. Flower crabs (*Portunus pelagicus*) trapped in abandoned drift net. (Photograph by: Ria Tan).

The *Live Fish Rules*³⁰¹ prescribes that all importers or exporters of live fish must apply for a licence via the AVA website.³⁰² In addition, the licensee must obtain a permit for each consignment and ensure that the whole consignment complies with the description indicated on the permit.³⁰³ If not, the importer or exporter may be liable for a fine of up to \$10,000 or a jail term of not more than 12 months or both.³⁰⁴

Before imported consignments are removed from the customs authorities, the importer must supply the customs officer with a health certificate concerning the consignment that was issued by the authorities in the country of despatch.³⁰⁵ The health certificate must indicate that the consignment complies with health requirements as laid down by the Director-General of the Agri-food and Veterinary Services.³⁰⁶ The failure to submit or comply with these requirements may render the importer liable to a fine of not more than \$10,000.³⁰⁷ While there are no equivalent requirements for a health certificate for exporting live fishes, rule 8(1) of the *Live Fish Rules* provides that any person who requires a health certificate may apply to the Director-General for one.

³⁰¹ Supra note 112.

³⁰² Ibid., rules 4(1) and 4(2) read with rule 3(1).

³⁰³ Ibid., rules 4(1) and 4(2).

³⁰⁴ Ibid., rule 4(3).

³⁰⁵ Ibid., rules 7 and 8.

³⁰⁶ Ibid., rules 6(1) and 6(2).

³⁰⁷ Ibid., rule 6(3).

Alteration of the health certificate or falsifying information required under these rules is an offence punishable with a fine of not more than \$10,000 or a jail term of 12 months or both. Further, any person who transfers or assigns his licence or permit may be subject to a fine of not more than \$10,000.³⁰⁸

Animals, animal skins, or plumage. — Section 8(e) of the *WABA* makes it an offence to expose, offer for sale or export any wild animal or bird (other than the six scheduled species of birds) or its skin or plumage, unless it can be shown that the animal or bird was lawfully killed or taken. A convicted offender faces a fine of up to \$1,000 and forfeiture of the wild animal or bird.³⁰⁹ The Director-General of Agri-food and Veterinary Services or an authorised officer may compound the offence by collecting up to \$500 from a person who has been reasonably suspected of committing the offence.³¹⁰

Animals for human consumption and other purposes. — Under section 10(1) of the *WABA*³¹¹, any wild animal or bird (whether dead or alive) or its parts cannot be imported into Singapore without written authorisation by the Director-General of the Agri-food and Veterinary Services. This excludes wild animals or birds imported in cold storage for food which can be shown to have been “killed outside Malaysia, Burma³¹², Kampuchea³¹³, Indonesia, Laos, Vietnam or Thailand”.³¹⁴

Based on this provision, it does not appear to be an offence to import wild animals and birds as food if they are killed in other countries such as China, India, and Australia. Lye Lin Heng described this as a “most disturbing” exception, particularly given that body parts of wild animals, such as bears’ paws and storks’ tongues and feet, are not uncommon in Chinese cuisine.³¹⁵ To date, there is no subsidiary legislation under the *WABA* to govern the importation of wild animals and birds from non-specified countries. Nonetheless, it is arguable that the situation is not dire because trade in certain animals which fall within the scheduled list of endangered species will be caught by the *ESA*.

Section 10(3) makes it an offence for anyone to import into or export from Singapore (or attempt to do so) any wild animal or bird or its parts without authorisation under section 10(1).³¹⁶ The penalty is a fine not exceeding \$1,000 in respect of each animal or part,³¹⁷ though the Director-General of Agri-food and Veterinary Services or an authorised officer may compound the offence by collecting a sum of up to \$500 from a reasonably suspected offender.³¹⁸

³⁰⁸ *Ibid.*, rules 10 and 11.

³⁰⁹ *Ibid.*, section 8.

³¹⁰ *Wild Animals and Birds (Composition of Offences) Order 2005*, supra note 65.

³¹¹ *WABA*, supra note 63, section 10(1).

³¹² Myanmar.

³¹³ Cambodia.

³¹⁴ *WABA*, supra note 63, section 10(2).

³¹⁵ Lye, “Wildlife Protection Laws”, supra note 29 at 305.

³¹⁶ *WABA*, supra note 63, section 10(3).

³¹⁷ *Ibid.*, section 10(3).

³¹⁸ *Wild Animals and Birds (Composition of Offences) Order 2005*, supra note 65.

At first glance, it appears that section 10(3) overlaps with section 8(e) of the *WABA* because both provisions bar exporting animals without authorisation.³¹⁹ However, as Lye suggests, through the reference to the authorisation issued under section 10(1), section 10(3) “relates to the export of an animal or bird that was imported into Singapore and therefore does not apply to the export of animals or birds that originate from Singapore”.³²⁰ Finally, it is observed that the *ESA* provides additional restrictions on importing and exporting scheduled endangered species. This leaves unauthorised importation and exportation of non-specified animals to be prosecuted under section 10(3).³²¹

Animals, biological products, and carcasses. — Further restrictions on importing animals and birds are found in sections 8 and 16 of the *Animals and Birds Act*³²² [*ABA*]. These provisions are concerned with controlling the movement of animal populations and preventing the spread of animal-borne diseases in Singapore. Section 2 of the *ABA* defines “animal” as “any mammal (other than man) or fish and includes any other living creature that is prescribed as an animal for the purposes of this Act or that falls within a class of animals that is prescribed for those purposes”. “Fish” were recently added to the definition of “animal” via the 2002 *Animals and Birds (Amendment) Act*³²³ as part of efforts to “provide the necessary protection for the health of fish in Singapore and the regulation of trade in aquatic animals in accordance with international requirements”.³²⁴ The term “fish” is defined as including “any of the varieties of marine, brackish water or fresh water fishes, crustacea, aquatic mollusca, turtles, marine sponges, trepang and any other form of aquatic life and the young and eggs thereof”.³²⁵ Meanwhile, the term “bird” “includes domestic fowls, ducks, geese, turkeys, guinea fowls and pigeons of any age or sex and the eggs thereof”.

Unlike the definition of “animal” under Part IV of the *ABA*,³²⁶ the section 2 definition does not expressly include reptiles and insects. However, this should not be a cause for concern. During the Second Reading of the *Animals and Birds (Amendment) Bill*, the Minister in-charge of the Bill stated that the current definitions of “animal” and “disease” “allows for the Minister to expand the definitions of “animal” and “disease” through an order and a notification respectively in the Government Gazette, should diseases transmitted by other organisms currently not covered in this Act subsequently become significant”.³²⁷ This is probably captured by the broad catch-all phrase “any other living creature that is prescribed as an animal for the purposes of this Act”.

Section 8(1) of the *ABA* prohibits importing and transshipping animals, birds and veterinary biologics (biological products such as blood and tissues), unless they were imported in accordance to the licence granted by the Director-General of Agri-food and Veterinary Services. Similarly, section 16 prohibits the exportation of animals, birds or their carcasses unless a licence has been

³¹⁹ See preceding sub-section, above.

³²⁰ Sections 10(3)(a) and 10(3)(b); Lye, “Wildlife Protection Laws”, supra note 29 at 306 (Lye’s essay refers to sections 9(2)(a) and 9(2)(b) instead; these provisions are identical to the present-day sections 10(3)(a) and 10(3)(b)).

³²¹ Lye, “Wildlife Protection Laws”, supra note 29 at 306.

³²² Cap. 7, 2002 Rev. Ed. Sing. [*ABA*].

³²³ No. 10 of 2002.

³²⁴ Sing., *Parliamentary Debates*, vol. 75, col. 109 at 111 (8 Jul.2002) (Dr Vivian Balakrishnan).

³²⁵ *ABA*, supra note 322, section 2.

³²⁶ *Ibid.*, section 41.

³²⁷ Supra note 324.

issued by the Director-General and the conditions of the licence are observed. Any person who contravenes section 8(1) or 16(1) will be liable to a maximum fine of \$10,000 or a jail term of not more than 12 months or both.³²⁸ The Director-General may, however, compound these offences.³²⁹

The *Animal and Birds (Importation) Order 2009*³³⁰ clarifies the law on importing “any carcase, semen, fodder, litter, dung or any product of animals or birds, or any article or substance that is likely to convey or spread any disease”.³³¹ Generally, these parts or products may not be imported or transhipped except for certain purposes and subject to certain restrictions.³³² For instance, animal semen may only be imported for artificial insemination purposes; clinical and pathological specimens may only be used for laboratory diagnosis, tests or research purposes; and fertiliser containing animal products may only be used as fertiliser.³³³ Such consignments must comply with the terms of the permit and be accompanied by a health certificate.³³⁴ In addition, they may be subject to inspection or sampling.³³⁵

Noxious insects, germs, viruses, harmful bacteria and genetically-modified organisms. — Section 9(1) of the ABA prohibits import or possession of living noxious insects, pests, living disease germ, virus, harmful bacteria culture, or genetically modified organisms, except when the Director-General of the Agri-food and Veterinary Services has given permission in writing. Convicted offenders will be liable to a fine of not more than \$10,000 or a jail term of not more than 12 months or both.³³⁶

E. OFFENCES INVOLVING ANIMALS

Pigeons. — Under the *Pigeon Rules*, it is an offence to feed stray pigeons on any premises or public place.³³⁷ A “stray pigeon” is defined as a pigeon which has undetermined ownership.³³⁸ It is also an offence to release pigeons in any place within Singapore.³³⁹ The penalty for feeding or releasing stray pigeons is a fine not exceeding \$500. The *Animals and Birds (Composition of Offences) Rules* provides that the offences under any rule made under the ABA may be compounded by the Director-General of the Agri-food and Veterinary Services or his authorised officer for a sum of not more than \$1,000.³⁴⁰

³²⁸ ABA, supra note 322, sections 8(3) and 16(3).

³²⁹ *Animals and Birds (Composition of Offences) Rules*, (Cap. 7, R. 5, 2004 Rev. Ed. Sing.), rule 2(1).

³³⁰ G.N. S 126/2009 Sing.

³³¹ Ibid., paragraph 2.

³³² Ibid., paragraphs 3(1) and 3(2).

³³³ Ibid., First column and Third column of the Schedule.

³³⁴ Ibid., Fourth column of the Schedule.

³³⁵ Ibid.

³³⁶ ABA, supra note 322, section 9(2).

³³⁷ *Pigeon Rules*, supra note 81, rule 10.

³³⁸ Ibid., rule 2. Refer to the sub-section on “Pigeons” in Part 4, “Keeping Animals” for a discussion on which species might be included.

³³⁹ Ibid., rule 11.

³⁴⁰ Ibid., rule 2, read with ABA, supra note 322, section 69.

Faecal matter. — Regulation 17A of the *Environmental Public Health (Public Cleansing) Regulations*³⁴¹ states that all persons who bring or allow a domestic animal to enter a public place must remove and dispose of all faecal matter produced by the animal in a hygienic manner (Fig. 5.34). Public places do not include national parks or public parks³⁴² which are dealt with separately under the *PTA*. Convicted first-time offenders are liable to be fined up to of \$1,000 or \$100 for each day of continuing offence.³⁴³

Public nuisance offences. — Under the *Miscellaneous Offences (Public Order and Nuisance) Act*³⁴⁴ [*MOA*], it is an offence to bathe or wash an animal “on a public road, or in, upon or by the side of any public tank, reservoir, watercourse or stream”.³⁴⁵ It is also an offence to dispose animal carcasses in such a way that they become “a common nuisance”.³⁴⁶ In addition, dead animals are prohibited from being placed “on or near any public road”.³⁴⁷ Convicted offenders face a fine of up to \$1,000. Repeat offenders are subject to a higher fine ceiling of \$2,000.³⁴⁸



Fig. 5.34. This sign was put up in the Ubi Avenue 1 car park to notify the public about the \$1,000 penalty for not picking up faecal matter after their pet dogs. (Photograph by: Hugh Tan Tiang Wah).

³⁴¹ Cap. 95, Reg. 3, 2000 Rev. Ed. Sing.

³⁴² *Ibid.*, rule 17A.

³⁴³ *Ibid.*, rule 30(1).

³⁴⁴ Cap. 184, 1997 Rev. Ed. Sing. [*MOA*].

³⁴⁵ *Ibid.*, section 11(1)(b) or section 11(1)(c) (inconvenience another person by doing so in designated bathing areas).

³⁴⁶ *Ibid.*, section 11(1)(d).

³⁴⁷ *Ibid.*, section 11(1)(e).

³⁴⁸ *Ibid.*, section 11(2).

Individuals may also be charged for nuisance offences arising from the actions of animals within their charge. For instance, it is an offence for an owner or person in-charge to allow the animal to “injure any tree or plant, or fence round any tree or plant, in or at the side of any public road, or to graze on the side of any public road”.³⁴⁹ It is also an offence to allow “any horse, cattle, goat, sheep or pig to stray upon or tethers or pickets” upon any public road, state land or privately held land without the permission of the owner or lawful occupier.³⁵⁰ In addition, no person can lead or drive “any horse, cattle, goat, sheep or pig in or near any public road without having them under proper control”.³⁵¹ Section 2 of the *MOA* defines “horse” broadly to include mules and asses, while “cattle” includes “bulls, cows, bullocks and buffaloes”. Convicted offenders may be fined up to \$1,000.³⁵²

Dangerous or ferocious animals. — Section 7(1) of the *MOA* states that each police officer shall capture any animal that is suspected to be “mad or dangerous” and any wild animal that endangers public safety while being “at large in or near any public road”. If there is a reasonable risk of personal injury to the police officer who is attempting to subdue the animal, he “may shoot or otherwise destroy the animal”.³⁵³ An email inquiry to the Singapore Police Force revealed that the police will “respond to all cases of wild animals found in public areas”,³⁵⁴ and that the most commonly encountered wild animals are snakes.³⁵⁵ If a wild animal is found within private property, the police will first assess “if there is an imminent danger to life” and where there is no such danger, the complainant will be advised to seek a pest control agency instead.³⁵⁶

Under section 11(1)(g) of the *MOA*, it is an offence to allow any unmuzzled ferocious dog or other animal to be at large or urge any dog or other animal to attack, worry or put in fear any person or animal. The penalty is a fine of up to \$1,000.³⁵⁷

Dogs. — Rule 9(1) of the *Dog Licensing Rules* states that any dog may be “seized, impounded, destroyed” or handled at the discretion of the Director-General of the Agri-food and Veterinary Services if it is found at large or unleashed while in public.³⁵⁸ Their owners will also be liable to a fine of not more than \$5,000.³⁵⁹ While the same consequences apply when the dog belongs to a scheduled breed³⁶⁰ or is required by licence to be muzzled but is found to be unmuzzled³⁶¹, there are more severe penalties for repeat offenders of this offence as they will be liable on conviction to a

³⁴⁹ Ibid., section 12(1)(a).

³⁵⁰ Ibid., section 12(1)(b).

³⁵¹ Ibid., section 12(1)(c).

³⁵² Ibid., section 12(1).

³⁵³ Ibid., section 7(2).

³⁵⁴ Email from DSP Soh Puay Hwee (28 Jul.2009).

³⁵⁵ Email from DSP Soh Puay Hwee (5 Aug.2009).

³⁵⁶ Email from DSP Soh Puay Hwee, supra note 354.

³⁵⁷ *MOA*, supra note 344, section 11(1).

³⁵⁸ *Dog Licensing Rules*, supra note 126, rule 9(1).

³⁵⁹ Ibid., rule 9(2)(a).

³⁶⁰ See the dog breeds listed under the Second Schedule of the *Dog Licensing Rules* in the “Dog” sub-section under the “Keeping Animals” section of this book.

³⁶¹ *Dog Licensing Rules*, supra note 126, rule 9(1)(c).

higher fine ceiling of \$10,000.³⁶² That being said, the *Animals and Birds (Composition of Offences) Rules* provides that the offences under any rule made under the ABA may be compounded by the Director-General of the Agri-food and Veterinary Services or his authorised officer for a sum of not more than \$1,000.³⁶³

Sections 8 to 10 of the *MOA* also stipulate a number of offences which specifically relate to dogs. Section 8(1) states that dog owner will be liable for a fine of not more than \$1,000 if it is established that his dog routinely runs “at persons or at vehicles or bicycles passing along a public road”.³⁶⁴ Section 9 makes it an offence for an individual to negligently allow a ferocious dog to be unmuzzled in public. Convicted offenders will be liable to a fine of not more than \$5,000.³⁶⁵ If the dog was found to have bitten or attempted to bite anyone, the Magistrate’s Court may even issue an order to put down the dog.³⁶⁶ The original fine ceiling of \$1,000 had been increased in view of a rise in the number of dog attacks to innocent passers-by between 1993 and 1995. Indeed, during the Second Reading of the *Miscellaneous Offences (Public Order and Nuisance) (Amendment) Bill*, the Minister in-charge of the Bill, Ho Peng Kee, remarked that the enhancement of fine quantum was needed to “maintain their deterrent effect”.³⁶⁷

Both sections 9 and 11(1)(g) of the *MOA* deal with the offence of leaving a ferocious dog unmuzzled. The wording used in section 9 requires that the individual “negligently suffers to be at large any ferocious dog without a muzzle” whereas section 11(1)(g) merely states that the individual “suffers to be at large any unmuzzled ferocious dog or other animal...”. Given the absence of the word “negligently” and the fact that the rest of section 11(1)(g) deals with intentional actions, such as “sets on or urges any dog...to attack...any person or animal”, it seems rather ironic that section 11(1)(g) has a lower maximum fine of \$1,000 than the \$5,000 in section 9. It is submitted that this apparent overlap should be reviewed and the maximum fine quantum should be streamlined. Alternatively, if the Parliament considers that the threat posed by ferocious dogs is greater than any other animal, then section 9 should be retained while the words relating to dogs in section 11(1)(g) could be removed.

Under section 10 of the *MOA*, if a dog has injured any party, its owner may be liable for compensation of up to \$2,000 as well as a fine of up to \$5,000.³⁶⁸ Section 10(4) clarifies that proof of “a previous vicious propensity in the dog or the owner’s knowledge of such previous propensity or that the injury was attributable to neglect on the part of the owner” is not required.³⁶⁹ Section 10(5) further provides that the owner is taken to be the occupier of the place at which the dog was “permitted to live or remain at the time of causing any such injury”, unless the occupier can show that he was not the owner at the time of incidence and that the dog stayed on his premises “without his sanction or knowledge”.³⁷⁰ If more than one person occupied the premises, the dog will be

³⁶² *Ibid.*, rule 9(2)(b).

³⁶³ *Animals and Birds (Composition of Offences) Rules*, supra note 329 read with ABA, supra note 322, section 69.

³⁶⁴ *MOA*, supra note 344, section 8(1).

³⁶⁵ *Ibid.*, section 9(1).

³⁶⁶ *Ibid.*

³⁶⁷ Sing., *Parliamentary Debates*, vol. 65, col. 693 at 701 (27 Feb.1996) (Associate Professor Ho Peng Kee).

³⁶⁸ *MOA*, supra note 344, sections 10(1) and 10(2).

³⁶⁹ *Ibid.*, section 10(4).

³⁷⁰ *Ibid.*, section 10(5).

deemed to be owned by the occupier who stayed in “that particular part of the premises in which the dog was kept or permitted to live or remain at the time of the injury”.³⁷¹

Local case law states that an “owner” within the meaning of section 10(5) need not be the holder of the dog licence. In *Public Prosecutor v. Koo Ming Tju alias Koo Ming Tjoea*,³⁷² a woman was walking her dog when she was bitten on her hand by the accused’s dog. The judge noted that section 10 was a strict liability offence designed to “encourage greater vigilance on the part of dog owners to prevent their dogs from causing injuries to another person”.³⁷³ In order to convict the accused, the Prosecution had to prove two elements: (1) that the complainant’s injury was caused by a dog and (2) that the accused was the owner of the aforesaid dog. The accused countered that she should not have been deemed the owner of the dog when the actual licensed owner could be traced. This argument was rejected on the basis that the accused had referred to and treated the dog as if she was the owner. Further, the judge clarified that even if the accused was not the “owner” within section 10(5), she failed to show that the dog stayed on her premises “without [her] sanction or knowledge”.

It should be noted that not all injuries caused by dogs are compensable by or criminally punishable on the part of the dog owner. The injured party who is seeking compensation must be able to demonstrate that “he entered the house or premises in the ordinary course of his duties or with the express or implied permission of the occupier”.³⁷⁴ Unless this is proven, the owner will not be held criminally liable.³⁷⁵ The owner will also be exempted from liability if the injury was brought about by the victim’s own “wrongful act”.³⁷⁶ The scope of “wrongful act” has not been defined, but one postulates that it could include trespassing on private property which the dog is guarding or deliberately provoking the dog by hurting it.

Rule 8A was recently introduced into the *Dog Licensing Rules* to give the Director-General of the Agri-food and Veterinary Services certain powers when dealing with dog bite cases. It applies to dog bite cases happening on or after 15 Nov.2010. Rules 8A(1) and 8A(2) state that a person who reports that he or his animal has been bitten by a dog may be required to provide a medical or veterinary report on the injury sustained to the Director-General. The Director-General may in writing direct the licensee of the dog which is “reasonably believed to have bitten a person or another animal” to deliver the dog and any articles or substances which were in contact to an authorised examiner.³⁷⁷ Based on “the circumstances of the case and the severity of the injury caused”, the Director-General has the discretion to direct the licensee of the accused dog to comply with the requirements applicable to scheduled dogs³⁷⁸ and to “secure the premises where the dog is kept to prevent the escape of the dog from the premises”.³⁷⁹ If the licensee fails to comply with the Director-General’s directions, he will be liable for a fine of up to \$5,000.³⁸⁰ Alternatively, the

³⁷¹ Ibid., section 10(6).

³⁷² [2006] SGMC 2.

³⁷³ Ibid. at para. 52.

³⁷⁴ MOA, supra note 344, section 10(7).

³⁷⁵ Ibid., section 10(8).

³⁷⁶ Ibid., section 10(9).

³⁷⁷ *Dog Licensing Rules*, supra note 126, rule 8A(3).

³⁷⁸ See sub-section on “Dogs” in Part 4, “Keeping Animals”.

³⁷⁹ *Dog Licensing Rules*, supra note 126, rule 8A(4).

³⁸⁰ Ibid., rules 8A(5) and 16.

offences may be compounded by the Director-General of the Agri-food and Veterinary Services or his authorised officer for a sum of not more than \$1,000.³⁸¹

Penal Code offences. — The *Penal Code*³⁸² consolidates the general criminal offences in Singapore. It defines “animal” broadly to be “any living creature, other than a human being”.³⁸³ This definition was adopted from the *Indian Penal Code, 1860*.³⁸⁴

Section 289 of the *Penal Code* makes it an offence for anyone who knowingly or negligently fails to take sufficient control of an animal in his possession to “guard against any probable danger to human life, or any probable danger of grievous hurt from such animal”. Convicted offenders face a jail term of up to one year or a fine of up to \$5,000 or both.

Under section 377B(1)(a), it is an offence for an individual to penetrate his penis into the vagina, anus or any orifice of an animal.³⁸⁵ It is also an offence to cause or allow one’s own vagina, anus or mouth to be penetrated by the penis of an animal.³⁸⁶ If convicted of either of these offences, the offender is liable for a jail term of up to two years or a fine or both.³⁸⁷ An individual who causes another person to engage in such acts will be liable for an offence if the latter did not consent.³⁸⁸ Stiffer penalties of a jail term of up to 20 years and caning or a fine apply to the latter offence.³⁸⁹

Section 428 makes it an offence to commit mischief by “killing, poisoning, maiming or rendering useless” any animal.³⁹⁰ Under section 425, mischief refers to acting with the intent to cause or knowledge of the likelihood of causing wrongful loss or damage which results in destruction, injury or diminished value of the property. The offender does not need to know who owns the property and the mischief in question may even affect himself or collectively to himself and others.³⁹¹ A convicted offender will be imprisoned for up to five years or subject to a fine or both. This is a marked improvement from the predecessor provision which only applied when it concerned an animal worth \$5 or more³⁹² while a separate section 429 dealt with “killing or maiming cattle, etc., or any animal of the value of \$25”. Section 429 was repealed in 2008.

The new section 428 only came into operation on 1 Feb.2008, and to date, no reported cases has been tried under it. However, there are some cases which were tried under the former section 428, such as the case of *Public Prosecutor v. Gracia Michael*.³⁹³ There, the complainant’s three dogs,

³⁸¹ *Animals and Birds (Composition of Offences) Rules*, supra note 329, rule 2(1) read with ABA, supra note 322, section 69.

³⁸² Supra note 25.

³⁸³ *Ibid.*, section 47.

³⁸⁴ No. XLV of 1860.

³⁸⁵ *Penal Code*, supra note 25, section 377B(1)(a).

³⁸⁶ *Ibid.*, section 377B(1)(b).

³⁸⁷ *Ibid.*, section 377B(2).

³⁸⁸ *Ibid.*, section 377B(3).

³⁸⁹ *Ibid.*, section 377B(4).

³⁹⁰ *Ibid.*, section 428.

³⁹¹ *Penal Code*, supra note 25, Explanation 1 and 2 to section 425.

³⁹² Cap. 224, 1997 Rev. Ed. Sing.

³⁹³ [1999] 3 Sing. L.R. (R.) 249; [1999] SGHC 231.

including a boxer, had dashed across a road to mob the accused and his dog. Despite the accused's efforts to protect his dog, the boxer managed to bite his dog's left leg, causing it to bleed. It was only after the bleeding arose that the complainant succeeded in controlling his dogs and bringing them back across the road. Enraged by the attack on his dog, the accused confronted the complainant and proceeded to kick the boxer once in its stomach. The boxer eventually died from a ruptured liver. At district court level, the accused was convicted under section 428. On appeal, the then Chief Justice Yong Pung How rejected the accused's argument that he acted out of self-defence because there was a lapse time of five minutes between the attack and the final confrontation. The accused was found guilty and sentenced to a fine of \$1,000 or one week's imprisonment if he defaulted on paying the fine.³⁹⁴

In his judgment, the then Chief Justice Yong acknowledged that the case could also have been tried under the *ABA*, but even then, he noted that it did not merit "an altogether different standard of criminal sentencing".³⁹⁵ The then Chief Justice Yong also remarked that the circumstances under which the case arose were significantly attributed by the complainant's thoughtlessness (he was clearly incapable of handling three dogs at a time), and that future individuals like him "should be prosecuted under section 8 of the *MOA*".³⁹⁶

Animal abuse. — There is an overlap between the abovementioned section 428 of the *Penal Code* and Part IV of the *ABA* which deals with the prevention of cruelty to animals. For the purposes of Part IV, section 41 defines "animal" to "include any beast, bird, fish, reptile or insect, whether wild or tame".

Section 42(1) provides an extensive list of acts which have been deemed animal cruelty. These include brutally beating or frightening any animal,³⁹⁷ failing to give an animal sufficient food and water while transporting it between locations,³⁹⁸ inflicting unnecessary pain or suffering, or allowing such suffering upon any animal,³⁹⁹ and confining or lifting an animal in such a way that it undergoes unnecessary pain or suffering.⁴⁰⁰ Owners are prohibited from temporarily or permanently abandoning their animals.⁴⁰¹ Other offences include employing, procuring, or letting an animal for hire if the animal is unfit for employment,⁴⁰² and engaging in "the fighting or baiting of animal", including the management of such places and collection of money for admission to such places. Note, however, that section 42(3) exempts all acts which were done or not done "in the course of the destruction, or the preparation for destruction of any animal as food", provided there was no unnecessary suffering inflicted. Convicted offenders will be liable for a fine of up to \$10,000 or imprisonment for up to 12 months or both. If the offender is an owner who neglected to properly

³⁹⁴ Ibid. at para. 27.

³⁹⁵ Ibid. at para. 28.

³⁹⁶ Recall that section 8(1) makes a dog owner liable for a fine of not more than \$1,000 if it is established that his dog routinely runs "at persons or at vehicles or bicycles passing along a public road".

³⁹⁷ *ABA*, supra note 322, section 42(2)(a).

³⁹⁸ Ibid., section 43(1)(c).

³⁹⁹ Ibid., section 42(2)(d).

⁴⁰⁰ Ibid., section 42(2)(e).

⁴⁰¹ Ibid., section 42(2)(f).

⁴⁰² Ibid., section 42(2)(g).

care or supervise his animal, then he will be subjected to a fine of up to \$10,000.⁴⁰³ Section 42(1) is a compoundable offence under the ABA.⁴⁰⁴

In view of these wide-ranging animal cruelty provisions, the wider definition of “animal” would appear to pose some problems. One Member of Parliament, Teo Ho Pin, pointed out during the Second Reading of the *Amendment Bill* that it appears that under the current definition, “technically speaking, if a mosquito, which is an insect, bites you, and you kill the mosquito by cruelly beating it, you may be imprisoned for such an act”.⁴⁰⁵ In response to this comment, the Minister in-charge of the Bill, Vivian Balakrishnan, expressed that “there are no animal rights” being conferred onto the animals.⁴⁰⁶ Rather, intervention will be centred on “acts which go against our social norms” and “acts which will actually cause distress and pain to fellow human beings” and therefore, cruelty to animals under these provisions does not extend to “stomping on a cockroach or killing a mosquito”.⁴⁰⁷ In practice, the question as to whether an individual will be prosecuted for an offence is a matter of prosecutorial discretion. It is unlikely that resources will be expended on purely technical offences.

Case precedents would better illustrate the types of cases which section 42 targets. In *Public Prosecutor v. Seah Kian Hock*,⁴⁰⁸ the accused hit a dog with a metal stand a few days after the dog supposedly chased the accused’s son in a public car park. This left the dog severely injured. After an appeal by the Prosecutor to enhance his initial sentence, the presiding High Court judge reviewed the accused’s past history of violence and sentenced him to one month’s imprisonment while ordering him to pay his \$500 fine to the aggrieved dog owner as compensation. *Public Prosecutor v. Hooi Yin Wang David*⁴⁰⁹ was a similarly brutal case in which a man repeatedly beat a kitten’s head with his hand until its eyes swelled and tooth broke. After referring to the case as “one of the worst cases of animal abuse” and examining the accused’s long history of criminal convictions, the judge sentenced him to the maximum sentence of one-year imprisonment. The Straits Times has also reported that a number of composition cases, such as a \$250 fine on an individual who tied a myna by its leg to a window, another \$250 fine on an owner who tied a rubber band around his dog’s muzzle, and a \$1,000 fine on a pest control company that negligently caused the death of a dog.⁴¹⁰

Road accidents involving animals. — Under section 84(1) of the *Road Traffic Act*⁴¹¹, the driver of a vehicle has a duty to stop when he is involved in an accident where injury is caused to an animal. Section 84(6) defines “animal” restrictively as “any horse, cattle, ass, mule, sheep, pig, goat or dog”. This definition has been criticised and suggestions have been made to expand the definition to include all mammals.⁴¹²

⁴⁰³ Ibid., sections 42(1) and 42(2).

⁴⁰⁴ *Animals and Birds (Composition of Offences) Rules*, supra note 329, rule 2.

⁴⁰⁵ Sing., *Parliamentary Debates*, vol. 75, col. 109 at 117 (8 Jul.2002) (Dr Teo Ho Pin).

⁴⁰⁶ Ibid. at col. 121 (Dr Vivian Balakrishnan).

⁴⁰⁷ Ibid.

⁴⁰⁸ [1997] 1 Sing. L.R. (R.) 491; [1997] SGHC 53.

⁴⁰⁹ [2006] SGDC 204.

⁴¹⁰ Victoria Vaughan, “Animal abuse cases at a high” *The Straits Times* (5 Jun.2009) (Factiva).

⁴¹¹ Cap. 276, 2004 Rev. Ed. Sing.

⁴¹² Kezia Toh, “Road accidents: But what about cats...and other mammals” *The Straits Times* (26 Feb.2012) (Factiva).

The driver may also be required by any person with “reasonable grounds” to give his name and address as well as that of the vehicle owner and identification marks of the vehicle. If the driver declines to do so, that person shall report the accident at a police station as soon as reasonably practicable within 24 hours of the occurrence of the accident.⁴¹³

Section 84(3) further requires the driver to render such assistance as may be reasonably required by any police officer, or in the absence of any police officer, such assistance as may be reasonably in the power of the driver to render. Both statute and case law do not elaborate on what constitutes the minimum standard of assistance required. However, local lawyers have suggested that it may be sufficient to stop the vehicle, carry the injured animal to the side of the road and call for help.⁴¹⁴

Section 84(8) and section 84(9) set out the penalties for breaching section 84(3). A first-time offender will be liable on conviction to a fine of up to \$3,000 or imprisonment of up to 12 months whereas a repeat offender will be liable to a fine of up to \$5,000 or imprisonment of up to two years.⁴¹⁵ The driver may also be disqualified from holding or obtaining a driving licence.⁴¹⁶ At this juncture, it should be highlighted that while these provisions make reference to section 84(3), they expressly apply to accidents which “caused any serious injury or death to another person”.⁴¹⁷ Nonetheless, local lawyers have expressed that the same penalties should apply.⁴¹⁸

F. ANIMALS IN RESEARCH

The *Animals and Birds (Care and Use of Animals for Scientific Purposes) Rules*⁴¹⁹ [*Care and Use of Animals Rules*] define “animal” as “any live vertebrate, including any fish, amphibian, reptile, bird and mammal but shall not include any human being”.⁴²⁰ The exclusion of invertebrates suggests that animals such as crustaceans may be used without compliance with these rules.

Rule 3 lays down the conditions under which a person can keep or use an animal in research facilities. An owner, occupier, manager or controller of any premises can only “keep or use, or allow any person to keep or use, any animal in those premises for any scientific purpose” if he is licensed by the Director-General of the Agri-food and Veterinary Services.⁴²¹ The licensee must comply with the conditions prescribed on the licence,⁴²² and this includes observing the *National Advisory Committee for Laboratory Animal Research (NACLAR) Guidelines on the Care and Use of Animals for Scientific Purposes* [*NACLAR Guidelines*] and allowing the AVA to inspect the

⁴¹³ Supra note 411, section 84(1).

⁴¹⁴ Ibid.

⁴¹⁵ Ibid., section 84(8).

⁴¹⁶ Ibid., section 84(9).

⁴¹⁷ Ibid., section 84(8) and section 84(9)(a).

⁴¹⁸ Supra note 412.

⁴¹⁹ Cap. 7, R. 10, 2007 Rev. Ed. Sing. [*Care and Use of Animals Rules*].

⁴²⁰ Ibid., rule 2(1).

⁴²¹ Ibid., rule 3(a).

⁴²² Ibid., rule 3(b).

research facilities.⁴²³ In addition, the licensee must establish an institutional animal care and use committee.⁴²⁴ The scientific project which requires the keeping or use of the animal must be approved by the committee in writing before any scientific endeavour may be carried out.⁴²⁵ An attending veterinarian must also be employed to “provide adequate veterinary care to the animals in the research facility of the licensee”.⁴²⁶ The licence cannot be transferred or assigned to another person.⁴²⁷ Under rule 19, the penalties for breaching these rules are a fine of not more than \$10,000 or a jail term of up to 12 months or both. The *Animals and Birds (Composition of Offences) Rules* provides that the offences under these rules may also be compounded by the Director-General of the Agri-food and Veterinary Services or his authorised officer for a sum of not more than \$1,000.⁴²⁸

Rule 7 describes the institutional animal care and use committee. Each licensee must set up this committee before the animals are used or kept.⁴²⁹ Rule 7(3) stipulates that the committee must have a minimum of five members, including one member from each of the following classes: “(a) a veterinarian with training or experience in laboratory animal science and medicine and who has experience in the routine care of the species of animals used in the research facility; (b) a person with appropriate experience in the use of animals for scientific purposes; (c) a person who (i) is not affiliated in any way with the licensee; (ii) is not a member of the immediate family of any person who is affiliated with the licensee; and (iii) is not a user of any animal for any scientific purpose; and (d) a person whose primary concerns or interests are in non-scientific areas”.⁴³⁰ The aforementioned attending veterinarian qualifies under rule 7(3)(a), but the chief executive officer or similar managerial officer of a body corporate licensee may not qualify as a member at all.⁴³¹ At any time, the Director-General of the Agri-food and Veterinary Services may object to the appointment of any member or order for his removal.⁴³²

The function and duties of the committee are laid down in rule 8. These include referring to the *NACLAR Guidelines* when evaluating the programmes for care and use of animals at least biannually, inspecting the research and housing facilities at least once annually and preparing reports on these evaluation exercises.⁴³³ The committee is also responsible for deciding whether any proposed project should proceed and whether approval for any ongoing project should be suspended or terminated.⁴³⁴ In addition, the committee has the power to authorise “the treatment or humane killing of any animal for any scientific purpose” and to carry out continuing reviews on animals involved in long-term treatment at least once annually.⁴³⁵

⁴²³ AVA, *Care and Use of Animals for Scientific Purposes*, online: Agri-food and Veterinary Authority of Singapore <<http://www.ava.gov.sg/AnimalsPetSector/CareAndUseAnimalsForScientificPurp/>>.

⁴²⁴ *Care and Use of Animals Rules*, supra note 419, rule 7(1) read with rule 3(c).

⁴²⁵ *Ibid.*, rules 3(c) and 10.

⁴²⁶ *Ibid.*, rules 3(d) and 11.

⁴²⁷ *Ibid.*, rule 5.

⁴²⁸ *Ibid.*, rule 2 read with ABA, supra note 322, section 69.

⁴²⁹ *Care and Use of Animals Rules*, supra note 419, rule 7(2).

⁴³⁰ *Ibid.*, rule 7(3).

⁴³¹ *Ibid.*, rules 7(5) and 7(6).

⁴³² *Ibid.*, rule 7(9).

⁴³³ *Ibid.*, rules 8(1)(a), 8(1)(b) and 8(1)(c).

⁴³⁴ *Ibid.*, rules 8(1)(f) and 8(1)(g).

⁴³⁵ *Ibid.*, rules 8(1)(h) and 8(1)(i).

The licensee must also observe certain duties. He must keep records and reports on the keeping and use of these animals, and make them accessible for inspection by the Director-General.⁴³⁶ He must also ensure that there are facilities for quarantining animals upon arrival.⁴³⁷ If there is a disease outbreak or “unusual mortalities” within the research facility, the licensee must report to the Director-General and keep all other animals confined and isolated till the Director-General issues instructions.⁴³⁸ The licensee must not release any animal which he has reason to believe or suspect to be a potential disease carrier or infectious agent without the permission of the Director-General.⁴³⁹ If any of these rules are violated, the offenders will be liable to “a fine not exceeding \$10,000 or to imprisonment for a term not exceeding 12 months or to both”.⁴⁴⁰

In Dec.2010, the issue of animal testing was brought into the spotlight when it was announced that a feasibility study was being undertaken to determine whether a facility to breed large animals for scientific testing should be built in Singapore.⁴⁴¹ This was followed by letters to the forum by ACRES and the Society for Prevention of Cruelty to Animals (SPCA). ACRES called for a stronger emphasis on the *NACLAR Guidelines* to replace animals with alternative methods, reduce the number of animals used and refine projects to minimise involvement of animals, and for greater transparency on the extent and nature of use of animals in local research.⁴⁴² ACRES also urged greater involvement of the animal welfare organisations in checking the animal research facilities. The SPCA supported ACRES’ views and questioned whether it was sufficient for inspections to be conducted once a year when there were so many animal lives involved.⁴⁴³ The point on minimising animal testing is clearly understandable. However, with the present state of technology, it is submitted that it is not yet practically feasible to dispense with animal testing altogether.⁴⁴⁴ Commercial breeders are likely to be willing to do away with animal testing for ethical and cost reasons, but current pharmaceutical industry practice still requires testing in large animals and humans before the products can be released into the market. This being said, the writers support the case for greater transparency.

G. LAWS RELATING TO PLANTS

Prohibited plant species. — According to the section 10 of the *Misuse of Drugs Act*⁴⁴⁵ [MDA], “[i]t shall be an offence for a person to cultivate any plant of the genus *Cannabis*, or any plant of the

⁴³⁶ Ibid., rule 13.

⁴³⁷ Ibid., rule 15.

⁴³⁸ Ibid., rule 16.

⁴³⁹ Ibid., rule 17.

⁴⁴⁰ Ibid., rule 19.

⁴⁴¹ Goh Chin Lian, “Study on facility to breed large animals for tests” *The Straits Times* (20 Dec.2010) (Factiva).

⁴⁴² Louis Ng for Action Concerns Research and Education Society, Letter to Forum, *The Straits Times* (24 Dec.2010) A30.

⁴⁴³ Deirdre Moss for Society for the Prevention of Cruelty to Animals, Letter to Forum, *The Straits Times* (30 Dec.2010) A29.

⁴⁴⁴ Chang Ai-lien, “New research facilities to use large animals” *The Straits Times* (9 Dec.2012) (Factiva) (“But scientists say that while they continue to develop alternatives to animal testing, in many cases it is still impossible for a computer or test tube to substitute a complex biological system when studying a disease, vaccine or drug for efficacy and side effects.”)

⁴⁴⁵ Cap. 185, 2008 Rev. Ed. Sing.

species *papaver somniferum* or any plant of the genus *erythroxyton* from which cocaine can be extracted.” What is meant is that any plant belonging to *Cannabis* species (hemp, marijuana; Fig. 5.35), *Papaver somniferum* (opium poppy; Figs. 5.36, 5.37), or *Erythroxyton* species (formerly *Erythroxyton*; Fig. 5.38) that produces cocaine cannot be cultivated in Singapore.

The statutes do not offer further elaboration on which particular *Erythroxyton* species is prohibited, so one must turn to literature on plants for reference. Cintamula (*Erythroxyton cuneatum*), a native tree of Singapore found in primary, secondary and beach forests,⁴⁴⁶ is also cultivated.⁴⁴⁷ However, this species is not known to have cocaine.⁴⁴⁸ It should be noted, however, that the study conducted by Plowman and Rivier utilised a herbarium sheet specimen that was collected in 1910 to conduct tests done in the 1979, so there are two possibilities—that this species has no cocaine or that the samples were too old. Plowman and Rivier found that a 50-year-old herbarium specimen of another species contained approximately 36 to 107 times lower concentration of alkaloids.⁴⁴⁹ There is a cintamula tree growing in Changi Point that has been earmarked for conservation under the Heritage Tree Scheme.⁴⁵⁰ Another commonly cultivated street tree is the *Erythroxyton suaveolens*. Meanwhile, Colombian coca (*Erythroxyton novogranatense*) was previously cultivated as a hedge plant in Singapore for its beautiful, jade-green leaves and bright red fruits but is now prohibited⁴⁵¹ because this species is one of the commercial sources of cocaine.

The laws on opium extend to food containing poppy seeds. In 2002, it was reported that a company was fined \$60,000 for importing poppy seed cake mix.⁴⁵² A month later, popular British retail chain, Marks and Spencer, was forced to take its poppy seed biscuits off its shelves.⁴⁵³ According to the news report,⁴⁵⁴ foods containing poppy seed may contain morphine (prohibited substance under the MDA) which could cause someone’s urine specimen to test positive during drug tests. Importers of poppy seeds or products containing them should send a sample of these items to the Health Sciences Authority to verify that they do not contain morphine.⁴⁵⁵

⁴⁴⁶ R.C.K. Chung & H.T.W. Tan, *The Angiosperm Flora of Singapore: Erythoxylaceae* (Singapore: Singapore University Press and National Parks Board, 2006) at 2.

⁴⁴⁷ H.T.W. Tan & T. Morgany, *A Guide to Growing the Native Plants of Singapore* (Singapore: Singapore Science Centre, 2001) at 71.

⁴⁴⁸ T. Plowman & L. Rivier, “Cocaine and cinnamoylcocaine content of *Erythroxyton* species” (1983) 51(5) *Annals of Botany* 641.

⁴⁴⁹ *Ibid.* at 657.

⁴⁵⁰ NParks, *Heritage Tree Register*, online: National Parks Board <http://www.nparks.gov.sg/cms/index.php?option=com_content&view=article&id=197&Itemid=79>.

⁴⁵¹ H. Keng, *The Concise Flora of Singapore: Gymnosperms and Dicotyledons* (Singapore: Singapore University Press, National University of Singapore, 1990) at 94.

⁴⁵² “M&S biscuits are investigated over morphine fears” *Evening News* (19 Jul.2002) (Factiva).

⁴⁵³ *Ibid.*

⁴⁵⁴ John O’Callaghan “Singapore drug squad swoops on poppy seed biscuits” *Reuter News* (19 Jul. 2002) (Factiva).

⁴⁵⁵ *Ibid.*

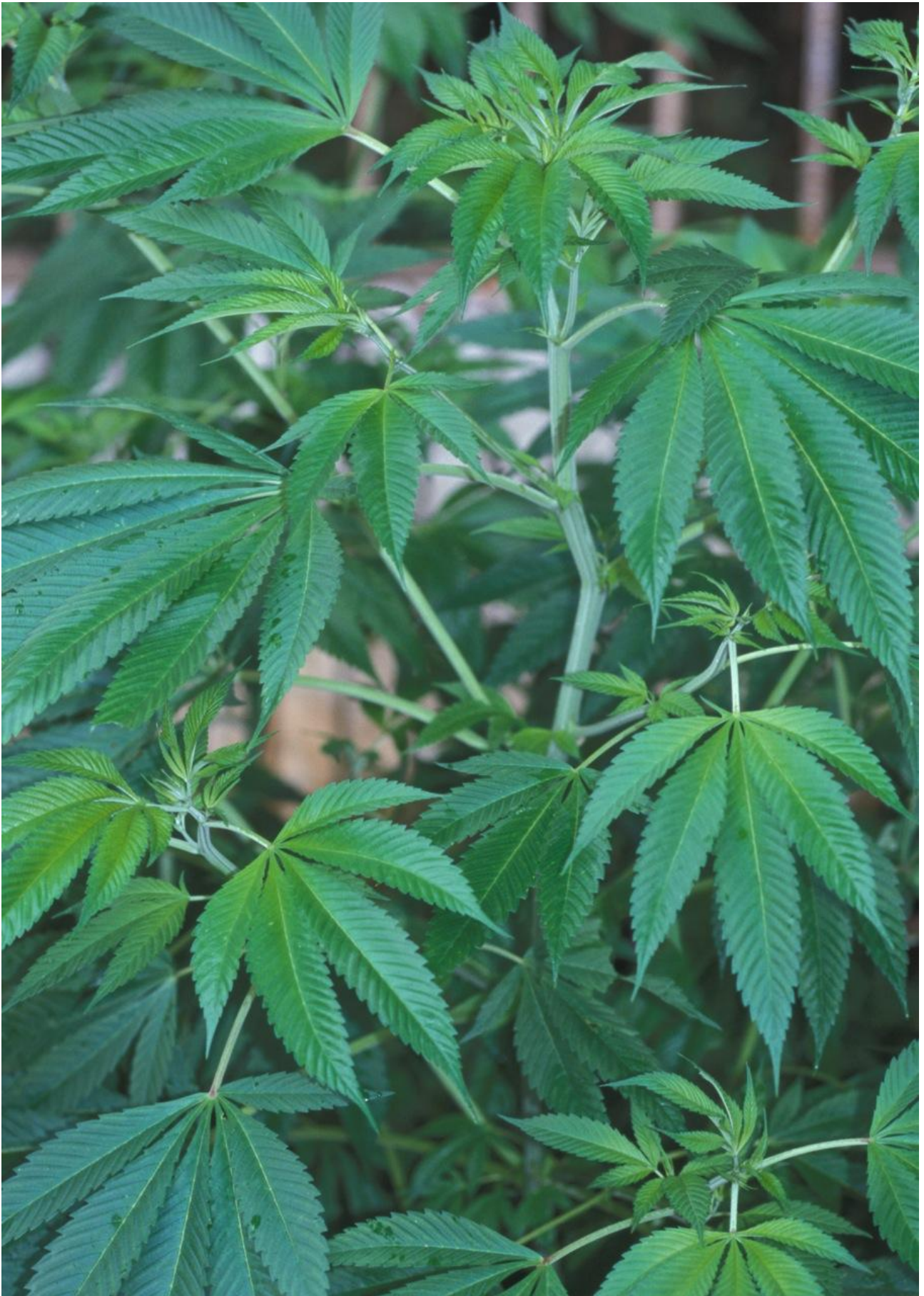


Fig. 5.35. Maijuana (*Canabis sativa*) growing in the Kunming Botanical Institute. (Photograph by: Wee Yeow Chin).



Fig. 5.36 Opium poppy (*Papaver somniferum*) flower (left) and young fruit (right) in the Royal Botanic Gardens, Kew, UK. (Photograph by: Wee Yeow Chin).



Fig. 5.37 Opium poppy (*Papaver somniferum*) fruit. (Photograph by: Wee Yeow Chin).



Fig. 5.38. Coca (*Erythroxylum novogranatense*). (Photograph by: Dbotany).

Apart from the *MDA*, section 17(1) of the *Control of Plants Act*⁴⁵⁶ [*CPA*] also provides that the Minister for National Development can absolutely or conditionally prohibit the cultivation of specific plant species in Singapore. Presently, no such orders have been issued. However, if such an order were issued, an individual who breached the order would be liable to a fine of up to \$10,000 or a jail term of not more than three years or both.⁴⁵⁷ Should a prohibited plant be found, unless otherwise proven, the owner and occupier will be “deemed to have permitted its growth”.⁴⁵⁸

Exceptionally, section 17(2) of the *CPA* prescribes that an order may be made to allow the cultivation of such plants, provided that there has been a permit issued by the Director-General of the Agri-food and Veterinary Services. However, once the permit has been revoked or expired, the licensee must “eradicate and destroy” all of the prohibited plants; if not, he shall be deemed to have grown them in contravention of section 17(1).⁴⁵⁹

⁴⁵⁶ Cap. 57A, 2000 Rev. Ed. Sing. [*CPA*].

⁴⁵⁷ *Ibid.*, section 34.

⁴⁵⁸ *Ibid.*, section 18.

⁴⁵⁹ *Ibid.*, section 32(5).

Protection of new plant varieties. — The *Plant Varieties Protection Act*⁴⁶⁰ [PVPA] was enacted in 2004 to “provide greater incentive to encourage the development of new plant varieties, and to spur innovation amongst plant breeders in Singapore”.⁴⁶¹ The PVPA was drafted based on the 1991 International Convention for the Protection of New Varieties of Plants (UPOV Convention) in response to the unique problems encountered by plant breeders who wanted to protect their discoveries. Prior to the enactment of the PVPA, plant breeders had to apply for patents to protect their new varieties of plants.⁴⁶² This was problematic because plants, unlike other inventions, may undergo genetic re-assortment during sexual reproduction and may not produce identical products (offspring) even though identical parent plants were used and the patent specifications were followed. With the PVPA, the breeder⁴⁶³ of a new plant variety may qualify for a grant of protection as long as he can show that the variety is commercially new,⁴⁶⁴ distinct from other known varieties,⁴⁶⁵ and that the relevant characteristics are stable after “repeated propagation”⁴⁶⁶ and are “sufficiently uniform”.⁴⁶⁷ In addition, he must provide a distinguishing name or identification (“denomination”)⁴⁶⁸ for the new variety.⁴⁶⁹ While application for registration should be made to the Registry of Plant Varieties, the AVA conducts the technical examination of the application to ascertain if it satisfies the substantive requirements.⁴⁷⁰

Presently, the PVPA only applies to the 15 plant genera and species that are set out in Table 5.1.⁴⁷¹ Section 4(2) states that the list may be extended by notification in the Government Gazette to include other plant genera and species. Section 2 defines “plant” as including “all fungi and algae but does not include bacteria, bacteroids, mycoplasmas, viruses, viroids and bacteriophages”. Since parties to the UPOV Convention have to extend protection for all plant species within 10 years of their accession to the agreement and Singapore acceded to the Convention on 30 Jul.2004⁴⁷², the amendment should be due in 2014.

⁴⁶⁰ Cap. 232A, 2006 Rev. Ed. Sing. [PVPA].

⁴⁶¹ Sing., *Parliamentary Debates*, vol. 79, col. 138 at 138 (15 Jun.2004) (Associate Professor Ho Peng Kee).

⁴⁶² In some countries, there are prohibitions against patenting animal or plant varieties. However, such a prohibition was rejected in Singapore because “allowing patents on varieties of plants and animal (non-human species) was necessary in order to encourage research into horticulture, agriculture and biotechnology”. Ng-Loy Wee Loon, *Law of Intellectual Property of Singapore* (Singapore: Sweet & Maxwell Ltd, 2009) at 439.

⁴⁶³ If the plant variety had been bred or developed during the course of employment, section 2(1) of the PVPA deems the employer to be the “breeder”.

⁴⁶⁴ PVPA, supra note 460, section 22(1)(a).

⁴⁶⁵ Ibid., section 22(1)(b).

⁴⁶⁶ Ibid., section 22(1)(c).

⁴⁶⁷ Ibid., section 22(1)(d).

⁴⁶⁸ Ibid., section 2.

⁴⁶⁹ Ibid., section 13.

⁴⁷⁰ Ng-Loy, supra note 462 at 439–440.

⁴⁷¹ PVPA, supra note 460, section 4 and Schedule.

⁴⁷² International Convention for the Protection of New Varieties of Plants, “Members of the International Union for the Protection of New Varieties of Plants”, online: <<http://www.upov.int/export/sites/upov/members/en/pdf/pub423.pdf>>.

Table 5.1. Plant genera and species to which the *PVPA* applies.

Plant Grouping	Botanical Name (according to the Schedule of the PVPA)	Botanical Name	Common Name
(1) Orchids	Dendrobium Sw.	<i>Dendrobium</i> Sw.	Dendrobium
	Mokara	× <i>Mokara</i> Hort.	Mokara
	Oncidium Sw.	<i>Oncidium</i> Sw.	Oncidium
	Vanda R.Br.	<i>Vanda</i> R.Br.	Vanda
	Aranda	× <i>Aranda</i> Hort.	Aranda
	Aranthera	× <i>Aranthera</i> Hort.	Aranthera
	Phalaenopsis Blume	<i>Phalaenopsis</i> Blume	Phalaenopsis
	Renantanda	× <i>Renantanda</i> Hort.	Renantanda
(2) Aquatic plants and ornamentals	Anubias	<i>Anubias</i> Schott	Anubias
	Cryptocoryne	<i>Cryptocoryne</i> Fisch. ex Wydler	Cryptocoryne
	Echinodorus	<i>Echinodorus</i> Rich. & Englm. ex A.Gray	Sword plant
	Limnophilla	<i>Limnophila</i> R.Br.	Limnophila
	Heliconia	<i>Heliconia</i> L.	Heliconia
(3) Vegetables	Brassica chinensis L.	<i>Brassica rapa</i> L. subsp. <i>chinensis</i> (L.) Hanelt	Baica, xiaobaicai
	Brassica chinensis var parachinensis	<i>Brassica rapa</i> L. subsp. <i>chinensis</i> (L.) Hanelt var. <i>parachinensis</i> (L.H.Bailey) Hanelt	Caixin

Once a grant of protection is issued under the *PVPA*, the grantee obtains certain exclusive rights, such as the rights to produce, sell, export and import the propagating material⁴⁷³ of the protected variety.⁴⁷⁴ These rights extend to harvested material “which were obtained through the unauthorised use of propagating material of the protected variety”.⁴⁷⁵ Each grant is valid for a period of 25 calendar years from the date of grant of protection and the grantee will be required to pay an annual fee throughout the entire period.⁴⁷⁶ During this period, a person who wishes to do any of the acts for which the grantee has exclusive rights must obtain the grantee’s authorisation by way of a licence.⁴⁷⁷ The grantee may also assign his grant of protection to such a person.⁴⁷⁸

Infringement of the grant of protection may occur in several ways. For instance, a person may violate section 28(1) by producing, conditioning, selling, importing or exporting stock propagating materials without authorisation.⁴⁷⁹ It is also an offence to propagate, sell or use the propagating material, in an unauthorised manner, which has been imported into Singapore.⁴⁸⁰ Additionally, it is an offence to import the material into Singapore without the approval of the grantee from a non-

⁴⁷³ *PVPA*, supra note 460, section 2 (“any part of the plant which may be used independently or in combination with other parts to generate another plant with the same essential characteristics”).

⁴⁷⁴ *Ibid.*, section 28(1).

⁴⁷⁵ *Ibid.*, section 28(7).

⁴⁷⁶ *Ibid.*, section 24.

⁴⁷⁷ *Ibid.*, section 28(2).

⁴⁷⁸ *Ibid.*, section 28(3).

⁴⁷⁹ *Ibid.*, section 30(1)(a).

⁴⁸⁰ *Ibid.*, section 30(1)(b).

UPOV member country or a UPOV member country in which the grant of protection is not viable.⁴⁸¹ In the event that such infringements occur, section 30(2) directs the Court to consider the provision of an injunction and “either damages or an account of profits”.

Exceptionally, these infringements do not apply to individuals who acted privately for non-commercial purposes, experimental or research purposes or for breeding a plant variety that is not essentially derived from the protected variety.⁴⁸² This would exclude activities such as home gardening or school projects. As for farming activities, there is no infringement if the genus or species of the protected variety is exempted under section 31 and the harvested material was obtained by purchase or with approval of the grantee or through subsequent propagation of such harvested material.⁴⁸³

The *PVPA* stipulates three further offences. An individual who submits or causes to be submitted a false registration, documentation or evidence of a new plant variety is liable to a fine of up to \$50,000 or a jail term of five years or both.⁴⁸⁴ It is also an offence to be falsely representing a plant variety as a protected variety in spite of knowing or having reason to believe that it is otherwise.⁴⁸⁵ The penalty for doing so is a fine of up to \$10,000. Finally, anyone who misuses “wilfully or negligently” the denomination for protected varieties may be fined up to \$10,000.⁴⁸⁶ Section 52 of the Act states that the Registrar of Plant Varieties or officers authorised by him have discretion to compound any offence deemed a compoundable offence with a sum of not more than \$2,000. However, there is no subsidiary legislation under the *PVPA* which stipulates which offences are compoundable.

Importing fruits and vegetables. — Part II of the *CPA* regulates the import and transshipment of fruits and vegetables in Singapore. Prior to the 1998 amendment of the Act, “harmful micro-organisms and pests” could be introduced into Singapore because the Primary Production Department (the previous name for the AVA) had no “legal power to impose or enforce any conditions on transshipment of fresh fruits and vegetables”.⁴⁸⁷ The original definition of “tranship” had been “transfer from one conveyance to another conveyance for the purpose of export”,⁴⁸⁸ but it has since been altered to include both the removal of the plant from the conveyance, and the return to or transfer to another conveyance for export purposes.⁴⁸⁹

The 1998 amendment also saw the addition of the current sections 7 and 8 to provide a “two-tier control system of licences and permits” which would give the authorities “the flexibility to impose and enforce conditions on both imports and transshipments”.⁴⁹⁰ Section 7(1) requires all individuals who “import for sale, supply or distribution or tranship any fresh fruit or vegetable” to do so in

⁴⁸¹ *Ibid.*, section 30(1)(c).

⁴⁸² *Ibid.*, section 31.

⁴⁸³ *Ibid.*, section 31(2).

⁴⁸⁴ *Ibid.*, section 44.

⁴⁸⁵ *Ibid.*, section 45.

⁴⁸⁶ *Ibid.*, section 46.

⁴⁸⁷ Sing., *Parliamentary Debates*, vol. 69, col. 647 at 648 (31 Jul.1998) (Mr Lim Hng Kiang).

⁴⁸⁸ *Control of Plants Act* (No. 18 of 1993).

⁴⁸⁹ *Control of Plants (Amendment) Act* (No. 32 of 1998).

⁴⁹⁰ *Parliamentary Debates* (Mr Lim Hng Kiang) *supra* note 487.

compliance with the conditions of a licence. Sections 8(1) and 8(2) state that there must be permits for each consignment of fresh fruits and vegetables for imports and transshipment respectively, and those consignments must comply with conditions on the permit. The penalty for non-compliance with sections 7(1), 8(1) or 8(2) is a fine of up to \$10,000 or a jail term of not more than three years or both.⁴⁹¹ However, should the Director-General decide otherwise, these offences may be compounded for a sum of not more than \$1,000.⁴⁹²

Plant cultivation. — Section 11 of the *CPA* regulates the use of pesticides in plant cultivation. Pesticides may only be used in cultivation of plants if “the pesticide is registered with the Director-General” and the individual who uses it is “a certified pesticide operator or the use is supervised” by such an operator.⁴⁹³ These operators must also make sure that the pesticides are properly stored, disposed appropriately, and the pesticide residue on the cultivated plants must be below the prescribed level.⁴⁹⁴ The penalty for breaching sections 11(1) or 11(2) is a fine of up to \$10,000 or a jail term of not more than three years or both.⁴⁹⁵ The penalty may be compounded at up to \$1,000.⁴⁹⁶

Note, however, that Part III of the *CPA* expressly excludes the application of this Part to “domestic and home gardening” and the “cultivation of any plant which is not for sale”.⁴⁹⁷ In all other circumstances such as commercial farming, individuals who cultivate plants on land must do so in compliance to the conditions stipulated on a licence granted by the Director-General of the Agri-food and Veterinary Services.⁴⁹⁸ Individuals who contravene this provision are liable to a fine of up to \$10,000 or a jail term of not more than three years or both.⁴⁹⁹ If the Director-General decides otherwise, the offence may be compounded for a sum of up to \$1,000 instead.⁵⁰⁰

Pest control. — Section 21(3) of the *CPA* states that the Director-General of the Agri-food and Veterinary Services may issue a notice to eliminate or forestall the spread of any pest by destruction or treatment of a plant or tool used for agriculture, or treatment of the land or plants or tool. Any individual who “obstructs or hinders the Director-General” may be liable to a fine of up to \$10,000 or a jail term of not more than three years or both.⁵⁰¹ Similarly, “[a]ny owner or occupier of any land or premises who wilfully fails to comply with the notice” shall be liable to the same penalties and an additional \$100 for each day of the continuing offence.⁵⁰²

⁴⁹¹ *CPA*, supra note 456, sections 7(2) and 8(3).

⁴⁹² *Ibid.*, section 47 read with *Control of Plants (Composition of Offences) Rules* (Cap. 57A, R. 5, 2000 Rev. Ed. Sing.).

⁴⁹³ *CPA*, supra note 456, section 12(1) (an individual who wants to be a certified pesticide operator must submit an application to the Director-General).

⁴⁹⁴ *Ibid.*, section 11(2).

⁴⁹⁵ *Ibid.*, section 34.

⁴⁹⁶ *Ibid.*, section 47.

⁴⁹⁷ *Ibid.*, section 9.

⁴⁹⁸ *Ibid.*, section 10.

⁴⁹⁹ *Ibid.*, section 34.

⁵⁰⁰ Supra note 492.

⁵⁰¹ *CPA*, supra note 456, section 21(6).

⁵⁰² *Ibid.*, section 21(7).

If plants on any land are deemed to be diseased, the Director-General may place “the land or under part thereof” under quarantine for a period of time⁵⁰³ in which section 22(2) forbids any individual from removing plants from the land unless there is permission from an authorised officer. The quarantine will only be lifted when the Director-General finds that there are no more diseased plants.⁵⁰⁴

Circumstances where immediate destruction of plants may be ordered. — Section 24(1) of the CPA states that the Director-General of the Agri-food and Veterinary Services may order diseased plants to be destroyed as “a matter of necessity and extreme urgency”. If this destruction is done by persons other than the occupier or owner of the land, then the cost will be borne by the occupier or owner.⁵⁰⁵

Clearing diseased land. — Cultivation on land may be ordered to be cleared if it is necessary for the prevention of the spread of any pest.⁵⁰⁶ With the Minister for National Development’s approval, the Director-General may direct “an owner or occupier of the land where the plant is” to “fell and burn or otherwise destroy” within a specified time frame.⁵⁰⁷ The value for cultivation losses is that of market value, but there will be no compensation for any diseased plant or where the owner or occupier violated the notice issued under Part V (Control of Pests) or where he had brought the pest infestation upon himself through neglect.⁵⁰⁸

Prohibition on exporting plants. — Under section 28 of the CPA, the Minister may absolutely or conditionally prohibit the export of any plant from Singapore to another country, unless the exporters have permits granted by the Director-General.

Prohibition against exporting or dealing in rubber without a licence. — Under the *Rubber Industry Act*⁵⁰⁹, one may not pack or ship rubber for export purposes, or make technically specified rubber, or “deal in, treat or store rubber” without a licence.⁵¹⁰ The Act defines “rubber” as “marketable rubber prepared from leaves, bark or latex of any rubber plant” and it excludes “any manufactured article made wholly or partly of rubber”.⁵¹¹ Section 2 provides that “rubber plant” refers to any of the following species: *Heavea brasiliensis* (para rubber) (Figs. 5.39, 5.40), *Manihot glaziovii* (ceara rubber), *Castilloa elastic* [sic, recte *Castilla*], *Ficus elastica* (rambong), including plants which the Minister for National Development declares to be so by notification in the Government Gazette. Convicted offenders are liable to a fine of not more than \$25,000 or a jail term of up to two years or both.⁵¹² Alternatively, at the discretion of the International Enterprise Singapore Board or authorised personnel, the offender may be able to compound the offence for a sum of money amounting to up to \$2,000.⁵¹³

⁵⁰³ Ibid., section 22(1).

⁵⁰⁴ Ibid., section 22(3).

⁵⁰⁵ Ibid., section 24(2).

⁵⁰⁶ Ibid., section 25(1).

⁵⁰⁷ Ibid., section 25(1).

⁵⁰⁸ Ibid., section 26.

⁵⁰⁹ Cap. 280, 1993 Rev. Ed. Sing.

⁵¹⁰ Ibid., section 3(1).

⁵¹¹ Ibid., section 2.

⁵¹² Ibid., section 23(1).

⁵¹³ Ibid., section 23(2).



Fig. 5.39 Para rubber (*Heavea brasiliensis*) fruits. (Photograph by: Wee Yeow Chin).



Fig. 5.40 Para rubber (*Heavea brasiliensis*) tree being tapped. (Photograph by: Wee Yeow Chin).

Dangerous trees and plants. — Part VI of the *PTA* deals with dangers posed by a tree or plant growing on premises adjacent to “a street, railway or rapid transit system or any part thereof”. Under section 37 of the *PTA*, the Commissioner may issue a notice to the occupier to require him to take measures to curb problems created by a plant or tree (a) which is likely to obstruct traffic or threaten lives or property of travellers “by falling or otherwise” or (b) obstruct, or potentially obstructs, the view of motorists or railway or rapid transit system operators (Fig. 5.41). As for plants or trees which constitute “an immediate threat to life or property” or are likely fire hazards, the Commissioner may undertake measures necessary to “cut or damage the tree or plant or any part of it”.⁵¹⁴ The costs incurred will be payable by the occupier of the premises.⁵¹⁵



Fig. 5.41 Albizia (*Falcataria moluccana*) tree falls are common because of the soft wood and shallow root system. (Photograph by: Darren Yeo Chong Jinn).

⁵¹⁴ *PTA*, supra note 113, section 38(1).

⁵¹⁵ *Ibid.*, section 38(2).

H. LAWS RELATING TO PARKS, NATURE RESERVES AND OTHER AREAS

Bird sanctuaries. — The *Wild Animals and Birds (Bird Sanctuaries) Order*⁵¹⁶ designates a number of places where the “killing and taking of any bird”, and “netting, snaring or taking by any means of contrivance of any bird” is prohibited.⁵¹⁷ The designated bird sanctuaries areas are as follows: the Singapore Botanic Gardens, the current Bukit Timah Campus of the National University of Singapore, the then Bukit Timah Forest Reserve, a plot of state land south-east of the Bukit Timah Forest Reserve, the Fort Canning Park, the Istana grounds, the catchment areas of MacRitchie Reservoir, Peirce Reservoir and Seletar Reservoir, and the entire island of Sentosa.

Even though the Order was first introduced in 1970, its exact purpose remains unclear. The prohibition on killing and trapping birds seems “superfluous” since section 3 of the *WABA* already bans the killing and taking of all birds (except for the six unprotected bird species) all over Singapore.⁵¹⁸ Further, although paragraph 3 of the Order enhances protection of birds by prohibiting “netting, snaring or taking by any means of contrivance of any bird” within designated bird sanctuaries, it does not state the penalties for doing so in a bird sanctuary so one must once again revert to the *WABA* which does not provide for enhanced penalties.⁵¹⁹ The Order also does not widen the scope of protection beyond that already available under the *WABA*. In addition, some of the designated bird sanctuaries are already areas for which the *PTA* provides more extensive protection to wildlife.⁵²⁰ These are the Botanic Gardens, Fort Canning Park, Central Catchment Nature Reserve, and Bukit Timah Nature Reserve. In light of these observations, Lye Lin Heng considered the possibility that the Order was passed to protect all birds, including the unprotected species, found within bird sanctuaries.⁵²¹ She later opined that this was unlikely to be the case because the *WABA* overrides subsidiary legislation passed under it.⁵²² It is suggested the penalties and offences under the Order should be enhanced and refined in the near future. Meanwhile, the earmarking of certain sites as bird sanctuaries has the benefit that the public is likely to be more conscious of their actions in these areas.

Marine ecosystems. — There are no laws which specifically govern the protection of marine ecosystems. However, four coral reefs⁵²³ were designated in the *1992 Singapore Green Plan* for conservation and placed under the purview of the NParks.⁵²⁴ The Pulau Semakau site was developed into the Semakau Landfill which currently supports thriving seagrass, mangrove, and coral ecosystems.⁵²⁵ Additionally, in 2003, the Sisters’ Islands site (Pulau Subar Darat and Pulau Subar Laut) was named a Marine Nature Area by the Urban Redevelopment Authority.⁵²⁶ It has

⁵¹⁶ Cap. 351, O. 1, 1990 Rev. Ed. Sing.

⁵¹⁷ *Ibid.*, paragraphs 2 and 3.

⁵¹⁸ Lye, “Wildlife Protection Laws”, supra note 29 at 311; Koh, supra note 10 at 160.

⁵¹⁹ Lye, “Wildlife Protection Laws”, supra note 29 at 311.

⁵²⁰ *Ibid.*

⁵²¹ *Ibid.*

⁵²² *Ibid.*

⁵²³ The four coral reefs are located in the areas surrounding St John’s island, Pulau Hantu, Pulau Semakau, and Pulau Sudong. Lye Lin Heng, “A Fine City in a Garden—Environmental Law and Governance in Singapore” [2008] Sing. J.L.S. 68 at 112 [Lye, “Fine City”].

⁵²⁴ *Ibid.*

⁵²⁵ Ria Tan, *Pulau Semakau*, online: WildSingapore <<http://www.wildsingapore.com/places/semakau.htm>>.

⁵²⁶ Sing., *Parliamentary Debates*, vol. 80, col. 2138 at 2138 (17 Jan.2006) (Mr Heng Chee How).

been clarified in Parliament that relevant government agencies convene to assess the environmental impact of “development projects [that] are proposed in marine nature areas” and that “[c]omprehensive environmental studies are carried out where necessary and measures are put in place to minimise any adverse impact”.⁵²⁷ However, given that environmental impact assessments are already being carried out on an ad hoc basis for projects taking place in areas other than Marine Nature Areas,⁵²⁸ the significance of the title of “Marine Nature Area” remains to be seen.⁵²⁹

Apart from the above, there seems to be limited protection for marine habitats covered under the *State Lands (Encroachment) Act*.⁵³⁰ Section 14 states that it is an offence to dig or take from any State land “any mineral, ravel, stone, coral, shell, sand, loam, brick-earth or other product” unless one has a permit from the Land Office (Fig. 5.42). Convicted offenders are liable to a fine of up to \$2,000.⁵³¹ Lye has noted that “permission is only granted for scientific, educational or conservation purposes”.⁵³²

National parks and nature reserves. — The *PTA* consolidates its predecessor Act and the *National Parks Act 1997*. It establishes two national parks and four nature reserves in Singapore. Part I of the Schedule declares the Singapore Botanic Gardens and the Fort Canning Park to be national parks, while Part II of the Schedule lists the Central Catchment Nature Reserve, Bukit Timah Nature Reserve, Labrador Nature Reserve, and Sungei Buloh Nature Reserve as nature reserves. The term “plant” has been defined to include “members of the [P]lantae, [P]rotista, [M]onera and [F]ungi kingdom[s], and includes any angiosperm, gymnosperm, pteridophyte, bryophyte, algae, lichen or fungus”.⁵³³ As for the term “tree”, it includes “any seedling, sapling or re-shoot of every description and any part thereof”.⁵³⁴

Section 8 of the *PTA* prescribes the prohibited activities relating to “trees, plants, etc.” found inside national parks and nature reserves. These activities may not be conducted without the permission of the Commissioner of Parks and Recreation (the “Commissioner”): “cut, collect or displace any tree or plant” or its parts;⁵³⁵ put up signs, shrines, altars, religious items, shelter or other structures;⁵³⁶ clear, dig or cultivate any land;⁵³⁷ wilfully deposit “any dirt, sand, earth, gravel, clay, loam, manure, refuse, sawdust, shavings, stone, straw” or other thing that does not originate from the national park or nature reserve in question.⁵³⁸ In addition, section 8(2) broadly provides that anyone who does acts which he knowingly or ought to have known “causes or may have caused alteration, damage or

⁵²⁷ AVA, *Care and Use of Animals for Scientific Purposes*, supra note 419.

⁵²⁸ Lye, “Fine City”, supra note 523 at 111, footnote 267 (For instance, in Jan.2006, JTC made an announcement in the Government Gazette that the public could view its EIA report on the reclamation of Pulau Ular at its office).

⁵²⁹ Lye, “Fine City”, supra note 523.

⁵³⁰ Cap. 315, 1985 Rev. Ed. Sing.

⁵³¹ Ibid., section 14.

⁵³² Lye, “Fine City”, supra note 523 at 112.

⁵³³ *PTA*, supra note 113, section 2.

⁵³⁴ Ibid., section 2.

⁵³⁵ Ibid., section 8(1)(a).

⁵³⁶ Ibid., section 8(1)(b).

⁵³⁷ Ibid., section 8(1)(c).

⁵³⁸ Ibid., section 8(1)(e).

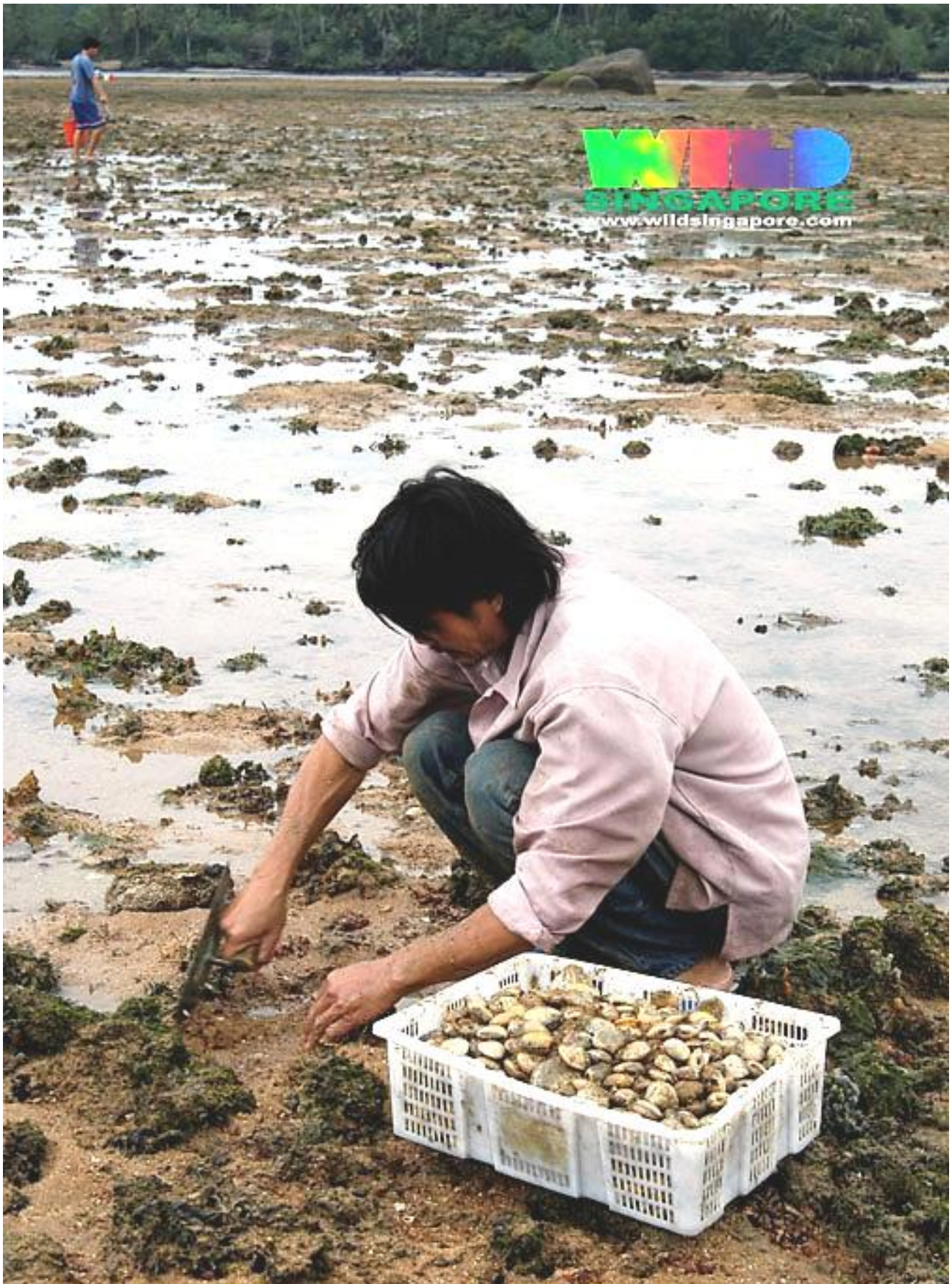


Fig. 5.42. Clam harvesting on Pulau Sekudu is illegal unless a permit is obtained from the Singapore Land Authority. (Photograph by: Ria Tan).

destruction to any property, tree or plant” has committed an offence. Unless the Commissioner approved of the aforementioned acts, first time offenders will be liable to a fine of up to \$50,000 or jail term of up to six months or both.⁵³⁹ Repeat offenders will be subject to an additional \$500 per day of continued illegal activity.⁵⁴⁰ The Commissioner may allow composition of compoundable offences for a sum of half the maximum fine or \$2,000 (whichever is lower).⁵⁴¹

A comprehensive definition of “animal” is provided under section 2 of the *PTA*. The term “animal” refers to “any mammal (other than man), bird, reptile, amphibian, fish (including shellfish), insect or any other living creature, vertebrate or invertebrate, and includes any egg or young thereof”. The *PTA* defines “organism” as a self-replicating genetic structure or a reproductive cell or developmental state of a self-replicating genetic structure.⁵⁴²

Restrictions on activities pertaining to animals found within national parks and nature reserves are provided in section 9 of the *PTA*. These activities may not be conducted without the permission of the Commissioner and they include ensnaring, displacing or feeding an animal (Figs. 5.43, 5.44,



Fig. 5.43. Do not feed the monkeys sign. (Photograph by: Ria Tan).

⁵³⁹ Ibid., section 8(3).

⁵⁴⁰ Ibid.

⁵⁴¹ Ibid., section 51(1) read with *Parks and Trees (Composition of Offences) Regulations 2006* (Cap. 216, Reg. 2., 2006 Rev. Ed. Sing).

⁵⁴² *PTA*, supra note 113, section 2.

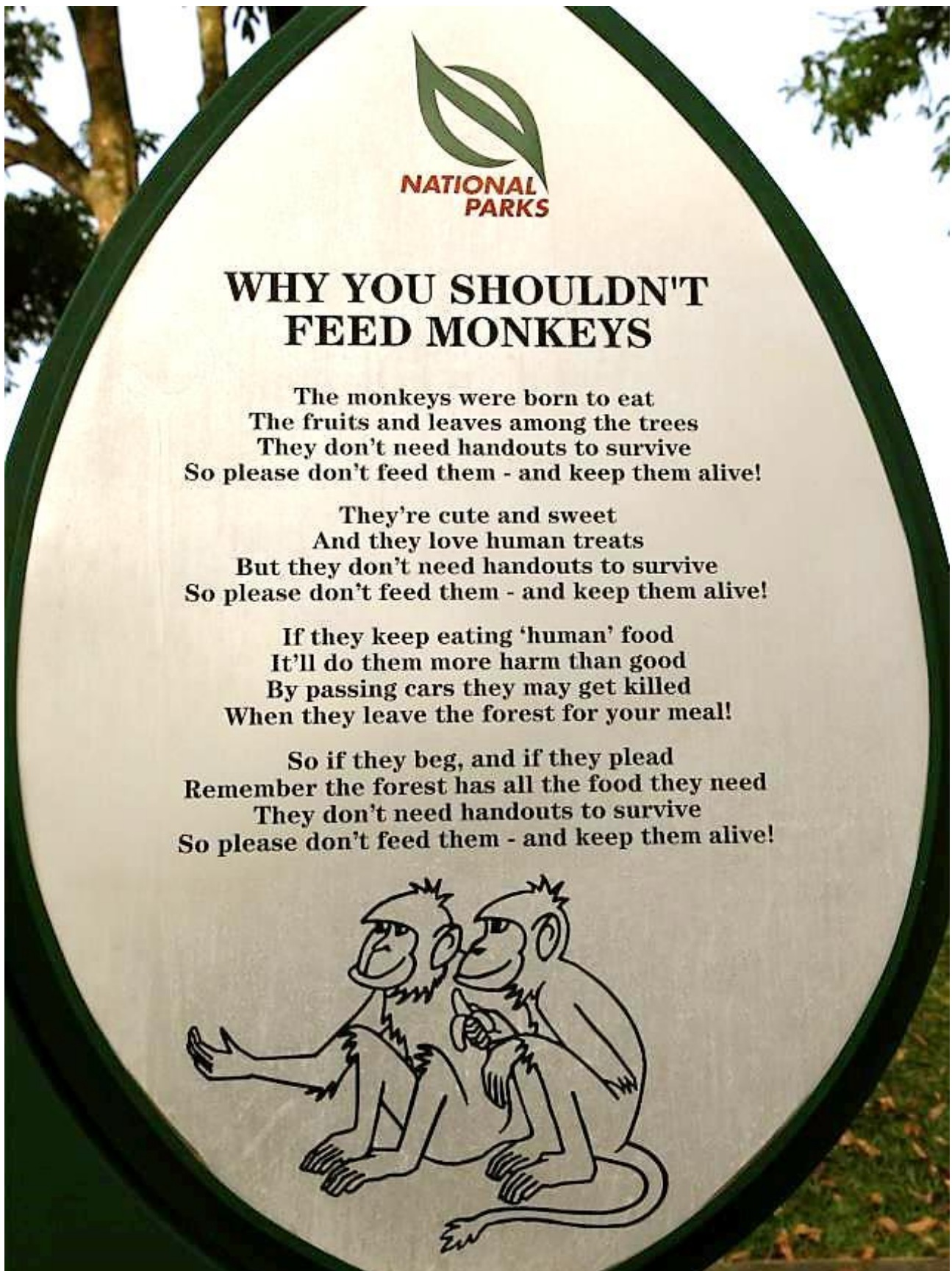


Fig. 5.44. This creative signboard which explains the rationale behind the ban against feeding monkeys was spotted at Upper Pierce Reservoir Park. (Photograph by: Ahmad Nizam Abbas).

4.45)⁵⁴³, disturbing or removing a nest⁵⁴⁴, and collecting, removing or wilfully displacing any other organism⁵⁴⁵. If this provision is breached, convicted offenders will be liable to a fine of up to \$50,000 or a maximum jail term of six months or both.⁵⁴⁶ The Commissioner may allow composition of compoundable offences for a sum of half the maximum fine or \$2,000 (whichever is lower).⁵⁴⁷

To provide an example of a case prosecuted under this provision, consider *Public Prosecutor v. Paneerselvam s/o Arunasalam*⁵⁴⁸ in which a man was sentenced to a \$4,000 fine for feeding bread to monkeys at the Central Catchment Nature Reserve without prior approval from the Commissioner. The accused had tried to argue that he gave the monkeys his bread because they started to become aggressive towards him after spotting his bread.⁵⁴⁹ The district judge appeared to dismiss the accused's claim, instead observing that section 9 seeks to "preserve the natural environment and to protect its flora and fauna from poaching and destruction"⁵⁵⁰ and recognised



Fig. 5.45. It is illegal to feed monkeys in national parks and nature reserves. (Photograph by: Ria Tan).

⁵⁴³ Ibid., section 9(1)(a).

⁵⁴⁴ Ibid., section 9(1)(b).

⁵⁴⁵ Ibid., section 9(1)(c).

⁵⁴⁶ Ibid., section 9(4).

⁵⁴⁷ Supra note 541.

⁵⁴⁸ [2008] SGDC 41.

⁵⁴⁹ Ibid. at para. 4.

⁵⁵⁰ Ibid. at para. 12.

“the dangers and consequences of the seemingly innocuous act of feeding wild monkeys”, such as encouraging reliance on humans for food and more aggressive behaviour towards humans.⁵⁵¹ Consequently, a deterrent fine was imposed.

Section 9(1)(d) prohibits the use of an “animal, firearm, explosive, net, trap, hunting device or other instrument” to capture an animal. An example of such activity would be baiting fish using worms in the lake of a national park. It is an offence to carry or possess “any explosive, net, trap or hunting device”.⁵⁵² Individuals are also prohibited from performing activities that they knew or ought to have known would result in injury or death of any animal or other organism in the national park or nature reserve.⁵⁵³ In addition, individuals may not bring, release or cause animals to be brought or released nor can they allow their domestic animals to roam into a nature reserve.⁵⁵⁴

Section 10 appears to be a safety net provision because it deals with offences pertaining to notices, boundary marks and other non-living organisms. Under section 10(1), it shall be an offence to “wilfully or negligently destroy, damage or deface any object of zoological, botanical, geological, ethnological, scientific or aesthetic interest” inside the national parks or nature reserves. This covers a wide variety of items, including statues and possibly even living things which somehow fall outside the definitions of “plant”, “animal” and “organism”. It is also an offence to damage, remove or modify official park notices and signs,⁵⁵⁵ and boundary marks.⁵⁵⁶ The penalty for doing so is a fine of not more than \$20,000⁵⁵⁷ or composition as mentioned above. Apart from the aforementioned penalties, it appears that the Commissioner may also issue reinstatement notices to offenders and have them repair the damage they have caused or cease wrongdoing.⁵⁵⁸

Enforcement powers in national parks, nature reserves and public parks. — Pursuant to section 2 of the *PTA*, a “public park” refers to land that is “utilised as a public park, recreation ground, playground, garden, public open space, walk, park connector or green verge” and which is “managed or maintained” by the National Parks Board. Section 42(1) of the *PTA* states that an individual may be arrested without warrant if he fails to comply with a request to leave a national park, nature reserve or public park for violating a law. Park rangers may also “inspect and search any baggage, equipment, package, container, tent, vehicle, boat, craft or place and seize any thing therein” as proof of any offence committed.⁵⁵⁹ Any vehicle, boat or thing brought onto national parks, nature reserves and public parks may be removed if deemed to be “likely to cause danger or obstruction” or in violation of the law under the *PTA*.⁵⁶⁰

Tree conservation in gazetted areas and vacant land. — Under section 14(1) of the *PTA*, unless permission is sought from the Commissioner, no one may sever a tree with a girth exceeding one

⁵⁵¹ Ibid. at para 9.

⁵⁵² *PTA*, supra note 113, section 9(1)(e).

⁵⁵³ Ibid., section 9(2).

⁵⁵⁴ Ibid., section 9(3).

⁵⁵⁵ Ibid., section 10(2)(a).

⁵⁵⁶ Ibid., section 10(2)(b).

⁵⁵⁷ Ibid., section 10(3).

⁵⁵⁸ Ibid., section 11.

⁵⁵⁹ Ibid., section 42(3).

⁵⁶⁰ Ibid., section 42(4).

metre measured half a metre above the ground if it is growing within the tree conservation area (Fig. 5.46) or any vacant land throughout Singapore.⁵⁶¹ The maps of the tree conservation areas are published in the Schedule of the *Parks and Trees (Preservation of Trees) Order*.⁵⁶² The two areas are the Tanglin-Bukit Timah-Pasir Panjang area and the Changi area where there are a “large number of clusters of mature trees and wooded areas”.⁵⁶³ The only instance when prior approval need not be sought is when “the condition of the tree constitutes an immediate threat to life or property”.⁵⁶⁴ In all other situations, the penalty for felling a tree without permission is a fine of up to \$50,000.⁵⁶⁵ Note also that while the offence may be compounded for \$2,000, this is subject to the Commissioner’s discretion.⁵⁶⁶

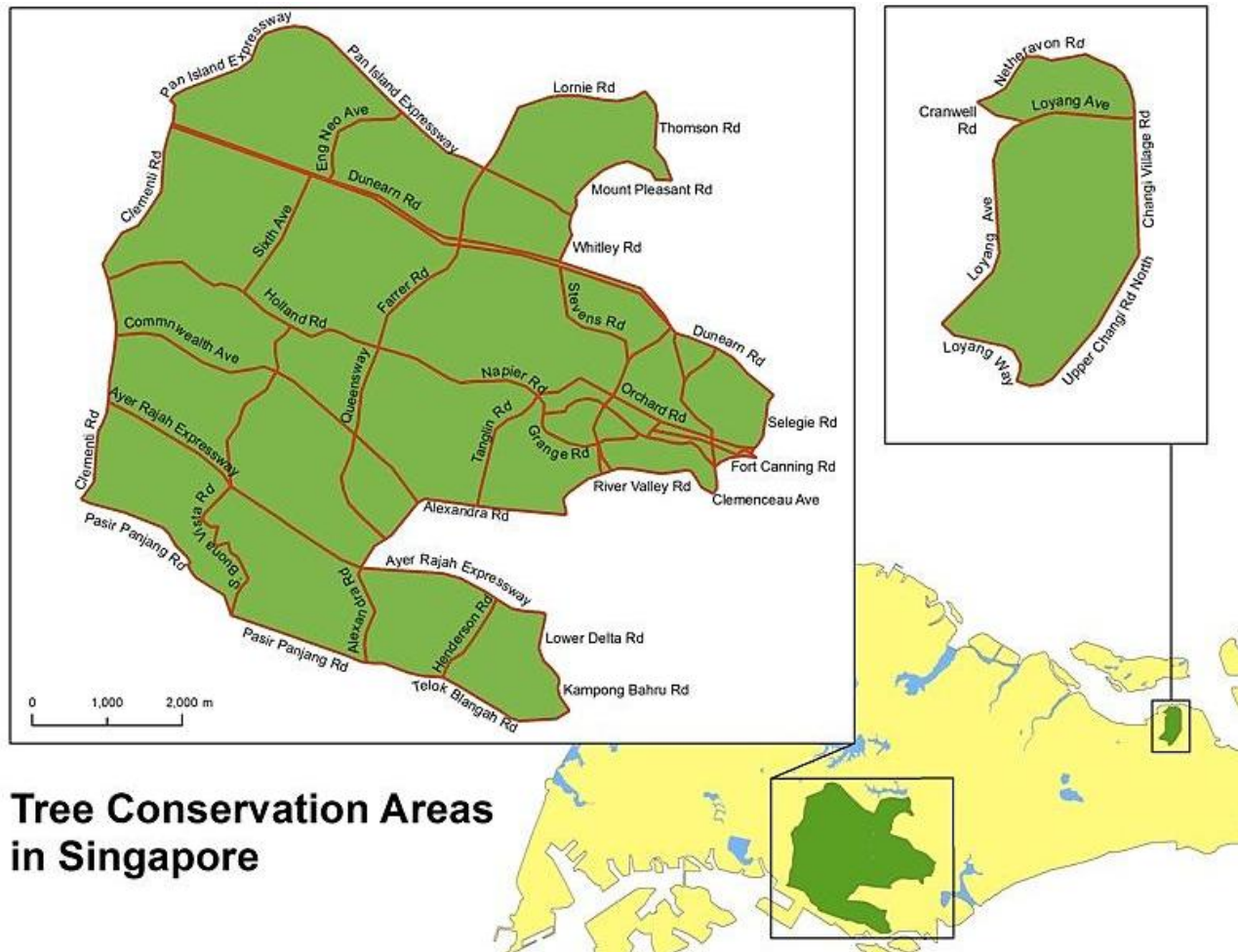


Fig. 5.46. Map of tree conservation areas in Singapore. (Map by: Alex Yee Thiam Koon).

⁵⁶¹ According to section 14(4) of the *PTA*, the girth of the tree is measured at a height of 50 cm from the ground.

⁵⁶² Cap. 216, O. 1, 1998 Rev. Ed. Sing.

⁵⁶³ Jamie Ee Wen Wei, “House owner fined \$6,000 for cutting down 3 trees” *The Sunday Times* (5 Jul.2009) (Factiva) [Jamie Ee, “House owner fined”].

⁵⁶⁴ *PTA*, supra note 113, section 14(6).

⁵⁶⁵ *Ibid.*, section 14(3).

⁵⁶⁶ *Ibid.*, section 51(1).

In Nov.2002, a 150-year-old chengal pasir tree (*Hopea sangal*) was chopped down by contractors who were hired by the property firm DTZ Debenham Tie Leung.⁵⁶⁷ At that time, the maximum fine was only \$10,000, but DTZ was imposed an \$8,000 fine and an additional compensation order of \$76,035 to the state. In coming to his decision, District Judge Kow Keng Siong took into account the “significance of the tree, which had stood as a “silent witness” to the birth of the nation, and is believed to have been the last of its kind here”.⁵⁶⁸ Subsequently, in 2005, the maximum fine was increased to \$50,000. More recently, in Jul.2009, it was reported that a home owner had to pay a composition fine of \$2,000 for each of the three trees which were chopped down in the Holland Road area. Indeed, in most situations, the matter can be settled without going to court. The only court case since 2003 took place in Jun.2009 when the property owner had “blatantly disregarded” the NPark’s tree conservation notice and was fined \$25,000 for cutting down a 21-metre tall tembusu tree.⁵⁶⁹ His contractor was also fined the same quantum.

It is also an offence punishable with a fine of not more than \$50,000 to damage trees with a girth exceeding one metre measured half a metre above ground that are growing in tree conservation areas.⁵⁷⁰ Section 2 of the *PTA* states that damage can be incurred by using chemicals or accidentally spilling oils, ringbarking the plant, adding tree climbing spikes, affixing objects such as a sign, hurting the root zone by excavation, or stockpiling it with materials.

Heritage road green buffers. — In addition to tree conservation areas, the Minister for National Development may also designate particular green verges or areas “along or on land fronting, adjoining or abutting any street” as heritage road green buffers (Fig. 5.47).⁵⁷¹ First introduced in 2005, this provision enables the conservation of up to 10 metres of “tall “green walls” of mature trees and multi-layered vegetation” growing behind green verges.⁵⁷² It should be clarified that “green verges” are defined as the stretch along a public road or “traffic island within a public street” that is used to grow trees or plants.⁵⁷³ Unlike green verges, green buffers had been previously unprotected under the law. At present, heritage road green buffers only involve state lands and will “continue to be applied” if the land is eventually sold to a private land owner.⁵⁷⁴ The list of green buffers as provided by the *Parks and Trees (Heritage Road Green Buffers) Order*⁵⁷⁵ [*Heritage Road Green Buffers Order*] consists of stretches of Mount Pleasant Road, South Buona Vista Road, Lim Chu Kang Road, Arcadia Road, and Mandai Road.⁵⁷⁶ These areas may be within and outside of tree conservation areas⁵⁷⁷ and are maintained by the NParks.⁵⁷⁸ If more roads are to be included in the future, maps of these areas will be duly published in the Government Gazette.⁵⁷⁹

⁵⁶⁷ Selina Lum, “Tree felling: Firm to pay \$76,000 to state” *The Straits Times* (25 Mar.2003) (Factiva).

⁵⁶⁸ *Ibid.*

⁵⁶⁹ Jamie Ee, “House owner fined”, *supra* note 563.

⁵⁷⁰ *PTA*, *supra* note 113, section 14(2).

⁵⁷¹ *Ibid.*, section 16(1).

⁵⁷² Sing., *Parliamentary Debates*, vol. 79, col. 502 at 502 (25 Jan.2005) (Mr Lim Swee Say).

⁵⁷³ *PTA*, *supra* note 113, section 2.

⁵⁷⁴ *Ibid.*

⁵⁷⁵ Cap. 216, O. 2, 2006 Rev. Ed. Sing.

⁵⁷⁶ *PTA*, *supra* note 113, section 2(2).

⁵⁷⁷ *Ibid.*, section 16(1).

⁵⁷⁸ *Ibid.*, section 17(1).

⁵⁷⁹ *Ibid.*, section 16(2).



Fig. 5.47. Arcadia Road heritage road green buffer. (Photograph by: Hugh Tan Tiang Wah).

Like in tree conservation areas, it is an offence to cut or damage a tree or plant in a heritage tree buffer. However, it will not be an offence if permission has been granted by the Commissioner of Parks and Recreation⁵⁸⁰ or if the tree or plant is deemed to be “dying or dead” or in such poor condition that it poses a threat to life or property.⁵⁸¹ Nonetheless, if an offence were committed, it may be compounded for \$2,000 if the Commissioner allows⁵⁸² or the convicted offender may face a fine of up to \$50,000 if the case goes to court.⁵⁸³

Separately, section 19(1) of the *PTA* states that unless the Commissioner grants permission, persons other than road authorities should not interfere with heritage road buffers. Section 19(1)(a) prohibits the modification, sealing off or removal of these green buffers, while section 19(1)(b) prevents the setting up of structures or objects “in, above or below” them. Finally, section 19(1)(c) forbids the erection, construction or laying within the green buffers “any fence, retaining wall, foundation, manhole, pipe, cable, mains or any obstruction or structure (whether temporary or permanent)”. If section 19(1) is breached, the convicted offender will be liable to a fine of up to \$50,000 and an additional \$500 for each subsequent day of continuing activity. Subject to the Commissioner’s

⁵⁸⁰ Ibid., section 18(1).

⁵⁸¹ Ibid., section 18(4).

⁵⁸² Ibid., section 51(1).

⁵⁸³ Ibid., section 18(2).

discretion, the composition fine of \$2,000 may be issued. Persons who contravene sections 18 or 19 may also be served reinstatement notices to remedy their acts.⁵⁸⁴

Section 20 of the *PTA* stipulates the conditions under which an individual may apply for permission to sever a tree within a tree conservation area, vacant state land or heritage road green buffer. This person must have sufficient proprietary interest⁵⁸⁵ and would probably have to be the land owner or a leaseholder. Section 20(6) states that the Commissioner will consider these factors in reaching a decision: (a) whether the tree or plant forms part of the “surrounding landscape or streetscape”, (b) whether it is a rare species, (c) number of trees or plants in the surrounding area, (d) if it has heritage significance, (e) possibility of it posing a danger to or damaging property or utility services, and (f) “soil conservation and erosion issues”.

Heritage trees. — Besides the heritage road green buffers, there is also a scheme to conserve heritage trees in all parts of Singapore.⁵⁸⁶ Members of the public are free to nominate trees⁵⁸⁷ which belong to rare species and have “special botanical, historical or cultural significance” and a girth measuring more than five metres measured one metre above ground.⁵⁸⁸ Despite the official criteria, there are several trees on the Heritage Tree Register which have smaller girths of 1.40 to 4 metres.⁵⁸⁹

It should be noted that the heritage tree status is not conferred by written law. This is problematic because the penalties for cutting down or damaging a tree will not apply if it does not grow within a tree conservation area or heritage road green buffer. Thus, it is suggested that the *PTA* should be amended to reflect that the heritage trees enjoy the same standing as trees growing within tree conservation areas and heritage road green buffers. In reality, these trees are usually accompanied by metal signages which explain their heritage status, so it is quite unlikely for members of public to mistakenly chop them down.

Planting areas and streetscapes. — All premises with open air parking areas at street level must be bound by a planting area.⁵⁹⁰ Section 23(1) of the *PTA* prescribes that dimensions for these planting areas as up to 2 metres wide, or up to 5 metres wide from “the front boundary of the premises adjoining or abutting a public street”. However, the Minister can issue a notification that alters these dimensions if he deems it necessary to “enhance greenery and promot[e] the use of trees and plants as important elements of streetscapes and landscapes”.⁵⁹¹ This particular provision also applies to premises which have building plans that do not require the permission of the

⁵⁸⁴ *Ibid.*, section 21.

⁵⁸⁵ *Ibid.*, section 20(2).

⁵⁸⁶ NParks, *Heritage Trees Directory*, online: National Parks Board <http://www.nparks.gov.sg/cms/index.php?option=com_directory&task=heritagetree&Itemid=100>

⁵⁸⁷ NParks, *Nominate A Heritage Tree*, online: National Parks Board <http://www.nparks.gov.sg/cms/index.php?option=com_chronocontact&chronoformname=nominate_heritage_tree>.

⁵⁸⁸ NParks, *Heritage Trees*, online: National Parks Board <http://www.nparks.gov.sg/cms/index.php?option=com_content&view=article&id=196&Itemid=79> and NParks, *Heritage Tree Scheme*, online: National Parks Board <http://www.nparks.gov.sg/cms/index.php?option=com_content&view=article&id=199&Itemid=79>.

⁵⁸⁹ *Supra* note 586.

⁵⁹⁰ *Parks and Trees Act (Planting Areas) Notification* (Cap. 216, N. 3, 2006 Rev. Ed. Sing.), sections 2 and 3.

⁵⁹¹ *PTA*, *supra* note 113, section 23(3).

Commissioner of Building Control. The onus of maintaining the planting area rests on the occupier.⁵⁹²

Section 24 deals with planting areas. It is an offence to conduct building works “in respect of the planting areas” without the Commissioner’s approval.⁵⁹³ Individuals who violate this provision are liable to a fine of up to \$30,000 and a further fine of \$500 for each continuing day upon conviction.⁵⁹⁴ Where works are done without approval from the Commissioner or no planting area is created within premises, the Commissioner may issue an enforcement notice to “make up such planting areas” within a specified time frame.⁵⁹⁵

After the planting areas are provided, there should be no interference with them.⁵⁹⁶ Without the Commissioner’s approval, no individual may (a) modify, seal up or eradicate any planting area, (b) set up a structure or object within such area, (c) put up or build “any fence, retaining wall, foundation, manhole, pipe, cable, mains or any obstruction or structure (whether temporary or permanent)” or conduct work which deviates from specifications approved by the Commissioner.⁵⁹⁷ Persons who violate these provisions are liable to a fine of not more than \$30,000 and a further fine of \$500 for each continuing day of activity.⁵⁹⁸ Reinstatement notices may also be issued to correct these interferences.⁵⁹⁹

Section 27(1) of the *PTA* provides for the Commissioner to issue notices to occupiers of premises along public streets to plant or replant particular trees or plants, maintain or conserve plants or trees growing within green margins, rid green margins of weeds or cut the grass, or take necessary measures as ordered by the Commissioner. If a tree or plant was grown upon notification by the Commissioner, no one may cut or damage it,⁶⁰⁰ unless the condition of tree or plant posed an imminent threat to property or life.⁶⁰¹ Persons who violate section 27(2) are liable to a fine of up to \$30,000. Note that section 27(5) defines “green margin” as part of the premises along the public street which is up to 5 metres in width from the edge of the premises or road reserve line (whichever is narrower).

⁵⁹² Ibid., section 25.

⁵⁹³ Ibid., section 24(1).

⁵⁹⁴ Ibid., section 24(2).

⁵⁹⁵ Ibid., section 24(3).

⁵⁹⁶ Ibid., section 26.

⁵⁹⁷ Ibid., section 26(1).

⁵⁹⁸ Ibid., section 26(2).

⁵⁹⁹ Ibid., section 26(3).

⁶⁰⁰ Ibid., section 27(2).

⁶⁰¹ Ibid., section 27(4).

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