### A BILL FOR AN ACT

JAN 2 0 2017

RELATING TO THE ROSE-RINGED PARAKEET.

#### BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

- 1 The rose-ringed parakeet, Psittacula krameri, SECTION 1.
- 2 is one of the most widespread invasive birds on the planet.
- 3 the United States, established populations occur in Florida,
- Hawaii, and southern California. In its native range of Africa 4
- 5 and India, this bird is considered to be one of the most
- significant agricultural pests of important food crops. 6
- Hawaii the rose-ringed parakeet population has been particularly 7
- damaging on Kauai, where the population has been growing 8
- 9 exponentially. Although the first pair of rose-ringed parakeet
- 10 were introduced in Kauai in the 1960s, the population was
- estimated at one hundred fifty to two hundred birds by 1994; 11
- 12 five hundred to one thousand birds by the late 2000s, and over
- two thousand birds by 2011. The current number of rose-ringed 13
- parakeet on Kauai is unknown, but observations suggest over five 14
- 15 thousand birds.
- The legislature further finds that the rose-ringed parakeet 16
- has been introduced in over thirty-five countries and five 17



- 1 continents. It is gregarious, a dietary generalist, and has a
- 2 high reproductive rate, is well-adapted to living in populated
- 3 areas, and is without predation pressure. The rose-ringed
- 4 parakeet is a successful invader and poses a significant threat
- 5 to local economies by damaging agriculture and the local
- 6 ecology, thereby causing invasive plant dispersion and competing
- 7 with native wildlife.
- 8 On Kauai, these birds cause more crop damage than all other
- 9 birds and mammals. Kauai residents have complained about the
- 10 noise from rose-ringed parakeet calls, feces spread below
- 11 roosts, damage to local gardens and orchards, and loss of
- 12 business profits and tourism. This bird is also a potential
- 13 vector of various pathogens and diseases (e.g., avian influenza,
- 14 avian malaria, salmonella) that could be passed to humans, pets,
- 15 and native wildlife. In addition, these birds are likely
- 16 dispersing invasive plant species and possibly destroying native
- 17 seeds.
- 18 The legislature further finds that the staff of the
- 19 National Wildlife Research Center has observed the rose-ringed
- 20 parakeet on Kauai and has concluded that these birds are: (1)
- 21 probably dispersing invasive plant species, including lilikoi

# S.B. NO. 772

- 1 and strawberry and yellow guava; (2) possibly destroying native
- 2 seeds, including koa; and (3) potentially competing with native
- 3 birds for fruits, seeds, and nesting sites.
- 4 The legislature also finds that the greatest negative
- 5 effects of the rose-ringed parakeet on Kauai, however, are
- 6 economic. These parakeets are known for damaging crops, and
- 7 reports from fruit farmers suggest that the parakeets are
- 8 damaging and reducing the yield of many crops, including lychee,
- 9 longan, and rambutan. In response to reports of damage to crops
- 10 and reduced yields, the National Wildlife Research Center
- 11 conducted a two-month research study in 2011 that documented the
- 12 movement and foraging patterns of the parakeet, contained
- 13 additional estimates of their population, and identified roost
- 14 site locations. This study is the only formal research study of
- 15 the rose-ringed parakeet on Kauai.
- 16 Additional research is needed for the development and
- 17 preliminary implementation of an effective control plan for
- 18 rose-ringed parakeets on Kauai. While the National Wildlife
- 19 Research Center of the United Stated Department of Agriculture
- 20 completed some preliminary analysis of rose-ringed parakeet
- 21 population dynamics in 2011, the population appears to have

## S.B. NO. 772

| 1  | grown substantially since then and the current number and       |   |  |
|----|---|---|--|
| 2  | distribut   | ion of birds is unknown. There is a strong need for   |  |
| 3  | more cost-effective rose-ringed parakeet control to benefit     |   |  |
| 4  | economically important crops on Kauai, as well as a need to     |   |  |
| 5  | reduce the potential for these birds to damage natural resource |   |  |
| 6  | and negatively affect human health and safety.                  |   |  |
| 7  | The p   | purpose of this Act is to appropriate funds to the    |  |
| 8  | department of land and natural resources to provide assistance  |   |  |
| 9  | and supplemental funding to the National Wildlife Research      |   |  |
| 10 | Center of   | the United States Department of Agriculture to:       |  |
| 11 | (1)   | Determine the current population size estimate of     |  |
| 12 |   | rose-ringed parakeet on Kauai;                        |  |
| 13 | (2)   | Locate and map the roost and rookery locations of     |  |
| 14 |   | rose-ringed parakeet on Kauai;                        |  |
| 15 | (3)   | Describe and map rose-ringed parakeet habitat uses,   |  |
| 16 |   | daily dispersal patterns, and overall range on Kauai; |  |
| 17 | (4)   | Estimate generally the agricultural, commercial,      |  |
| 18 |   | residential, and natural area damages by rose-ringed  |  |
| 19 |   | parakeets on Kauai;                                   |  |
| 20 | (5)   | Determine the types of human and wildlife diseases    |  |
|    |   |   |  |

carried by rose-ringed parakeets on Kauai;

21

| 1  | (6)   | conduct trials using different devices and methods     |  |
|----|---|--|--|
| 2  |   | that will reduce or deter rose-ringed parakeet         |  |
| 3  |   | populations, and                                       |  |
| 4  | (7)   | Develop and implement the beginning of an effective    |  |
| 5  |   | control plan for reducing the negative impacts of the  |  |
| 6  |   | rose-ringed parakeet on Kauai with an initial          |  |
| 7  |   | reduction target of five hundred birds or an estimated |  |
| 8  |   | ten per cent of the population.                        |  |
| 9  | SECTION 2. The department of land and natural resources         |  |  |
| 10 | shall provide assistance to and collaborate with the National   |  |  |
| 11 | Wildlife Research Center of the United States Department of     |  |  |
| 12 | Agriculture, including providing supplemental funding for       |  |  |
| 13 | completion of the Center's research study on the rose-ringed    |  |  |
| 14 | parakeet on the island of Kauai and related research,           |  |  |
| 15 | development, and implementation programs to reduce the negative |  |  |
| 16 | impacts of the parakeet on the island of Kauai.                 |  |  |
| 17 | SECTION 3. There is appropriated out of the general             |  |  |
| 18 | revenues of the State of Hawaii the sum of \$180,000 or so much |  |  |
| 19 | thereof as may be necessary for fiscal year 2017-2018 and the   |  |  |
| 20 | same sum or so much thereof as may be necessary for fiscal year |  |  |
| 21 | 2018-2019 for the department of land and natural resources to   |  |  |

7

- 1 assist the National Wildlife Research Center of the United
- 2 States Department of Agriculture to conduct research on the
- 3 rose-ringed parakeet as set forth in this Act.
- 4 The sums appropriated shall be expended by the department
- 5 of land and natural resources for the purposes of this Act.
- 6 SECTION 4. This Act shall take effect on July 1, 2017.

INTRODUCED BY:

2017-0700 SB SMA-1.doc

### S.B. NO. 772

#### Report Title:

Rose-Ringed Parakeet; Department of Land and Natural Resources; Appropriation

### Description:

Appropriates funds to the department of land and natural resources to assist with and provide supplemental funds to the National Wildlife Research Center to research the negative impacts of the rose-ringed parakeet on Kauai and develop and implement a control plan to reduce the negative impacts.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.