JBLE-E Annual Review of the Installation Pest Management Plan 20 May 2020 – 19 May 2021

Submission Date: 26 July 2021

I. Installation Name: Joint Base Langley-Eustis (Eustis), Fort Eustis

II. Currency of Installation Pest Management Plan (IPMP)

1.	Does the installation have an approved Installation Pest Management Plan (IPMP)?	**YES. See item VII.1. below.**
2.	Date the IPMP received final signature	**19 May 2020**
3.	Are you planning to rewrite/revise the IPMP?	**NO**
	If yes, when?	
4.	Have monthly reports been sent to the AFSPC Command Entomologist as required by AFI 32-1053, para 3.5.15? [Pesticide Inventory report, Pesticide Applicator Certification report, Pesticide Application report] If no, please submit all required reports along with this form. These are considered monthly updates to the IPMP.	**YES**

III. Integrated Pest Management Coordinator

1.	Has an integrated pest management coordinator been assigned in writing as required by AFI 32-1053, para 3.4.5? Please forward copy of appointment letter to AFSPC Command Entomologist along with this form.	**YES**

IV. Plan Maintenance:

Please list any minor changes (i.e. personnel changes, certifications, standard operating procedures, etc.) to the plan for the new Fiscal Year. Major plan revisions require re-staffing and re-submittal of the IPMP.

Approved/functional (see comments VII.1. below).

V. On-Site Assistance

Please indicate if you would like a Staff Assistance Visit (SAV) this year and briefly describe the reason for the visit.

No

VI. Aerial Applications

1.	Are there any projects requiring the aerial applications of pesticides for the upcoming FY?	**NO. See item VII.3. below.**
2.	Does the installation have an approved aerial spray Statement of Need for the project(s) from the AFSPC Pest Management Consultant?	**NO. See item VII.3. below.**
3.	Does the installation have the appropriate Environmental Assessment(s) (EA) or Environmental Impact Statement(s) (EIS)?	**NO. See item VII.3. below.**

VII. Additional Comments

1. Current IPMP status. The existing version of the JBLE-E IPMP was signed 19 May 2020 and therefore expires 18 May 2025. This review represents the first IPMP annual review since the plan was approved.

The only significant change to the IPMP identifying during the review would be voiding Appendix D (Aerial Applications) as discussed in item #3 below. Additionally, the Biting Arthropod Survey form (found at Annex N-3 of the IPMP) has been revised and is attached with this annual review. No other significant changes were identified during the review. Surveillance work for mosquitoes and forest insects was lacking in CY 2019-2020 due to staffing limitations and the pandemic. See comments in item #19 for details. The IPMP remains available for access by the installation community by being posted on the JBLE website when the plan was approved (https://www.jble.af.mil/Units/Army/Eustis-Enviromental/).

2. Tick warning signage. Standard tick warning signage was proposed by the IPMC previously for installment at training area entrances and the Nature Trail. Funding is not available currently, and will be readdressed at a later date. This task might get partially fulfilled if a National Public Lands Day grant is awarded or possibly via FY 21 Nature Trail habitat project is funded.

3. Aerial pesticide applications. Aerial pesticide applications represent a component of the JBLE-E Integrated Pest Management program toolbox. Applications of this type at JBLE-E are for large areas of invasive common reed, adult mosquitoes during serious health risk conditions, and potential forest pest control. The only aerial applications have been herbicide use to control common reed at the Fort Eustis Dredge Material Management Area (FEDMMA). An aerial application was conducted at the FEDMMA on 9 Oct 2020. This application was the third application for this site occurring in three consecutive years (2018, 2019 & 2020). Effectiveness is being evaluated; however, an actual dredge material operation is now expected in CY 2021 or 2022. No aerial treatments for adult mosquitoes or other arthropod pest organisms have been conducted for several years. However, some changes at the installation have occurred requiring new Aerial Application of Pesticides Statements of Need (AAPSON) for aerial applications against adult mosquitoes. This is due to the documented occurrence of the federally threatened Northern long-eared bat (*Myotis septentrionalis*) on JBLE-E. This was also due to the acoustic hit for the endangered Indiana bat; however, very recent surveys and consultations will eliminate that species from consideration. Additionally, the black rail (*Laterallus jamaicensis*) became listed as endangered in October 2020 and occurs within the geographical area surrounding the installation. To date, the black rail has not been observed on JBLE-E. However, an Environmental Assessment (EA) is needed and 633d CES is developing contract specifications for an EA that incorporates both installations under JBLE. Once completed JBLE-E will consult with AFCEC/COSC to prepare new AAPSONs. The existing AAPSONs noted in the IPMP are considered void until an EA is completed and new AAPSONs approved. Consequently, Appendix D (Aerial Applications) of the IPMP is considered void until a new AAPSONs are approved..

4. Red Imported Fire Ants (RIFA). A new RIFA colony was discovered on 17 Dec 2020 in the Slingload Training Area and Landing Zone (STALZ) area. The site was monitored but treatment was not deemed effective until ambient temperatures rose sufficiently. It remains uncertain how the colony became established in a remote area of Mulberry Island but is suspected of being brought in by soil used to at the Aviation Complex construction site. Bait treatment occurred in March and the colony did not appear to be active following the treatment. The site was monitored and no other evidence of RIFA was noted in the STALZ. IPMC is attempting to do more surveillance throughout Mulberry Island as time permits. To help preclude future infestations, Environmental Management Procedures 4.4.6.16 (Environmental Contracting Special Conditions) was modified to control regulated articles from entering the installation.

5. DOD/VDACS certifications. Tim Christensen (IPMC/CEIE) retains DOD pesticide applicator certification for categories 2 (Forest), 3 (Ornamental & Turf), 5 (Aquatics), 6 (Right of Way), 7 (Industrial, Institutional, Structure & Health) and 8 (Public Health) [AF-252-09-0316]. These certifications remain valid until August 2022. He recertified category 11 (Aerial Application) in May 2021. This certification remains valid through May 2024. Adam Priestley (CEIE/wildlife biologist obtained Virginia Department of Agriculture & Consumer Services (VDACS) Pesticide Applicator certification (119531-G) in 2020 for Virginia categories 2 (Forest), 3A (Ornamental), 3B (Turf), 6 (Right of Way) and 7D (Vertebrate Species) which expires 30 June 2023. The golf course maintenance superintendent holds VDACS certification for 3A and 3B through 2022. BOS contractors hold certifications in categories 3A, 3B, 5A (Aquatics), 6, 7A (General Pest), 7B (Wood Destroying Pests), and 8 (Public Health) through 30 June 2022.

6. FY 2020 Measures of Merit (MOM). The FY20 MOM was submitted to AFCEC in advance of the deadline.

7. Monthly pest management reports. All monthly reports were submitted to AFCEC though not all were sent by the 10th day of months following the report month. JBLE-E is striving to submit all by the 15th day of the month.

8. 2020 Pesticide Use Data Call. DOD installations were tasked with providing a list of pesticides and quantities applied in CY 2020 (tasker issued o/a 14 April). This tasker was different/separate from the MOM report and is expected to now be an annual report but definitive confirmation has not been received. The IPMC will incorporate future requirements into the MOM report if required and revise the monthly reports as feasible.
9. Mosquito/disease pathogen surveillance. Natural Resources & IPM Branch operations were reduced during the period of Dec 2018-Nov 2019 because the Branch consisted of only one staff member. Consequently, no mosquito species surveillance was conducted in CY 2019 due to Branch staffing shortfalls. The pandemic precluded adequate surveillance in CY 20. Mosquito species surveillance will be performed by CEIE beginning June/July. Additionally, CEIE provided traps and CO2 to McDonald Army Health Center Department of Public Health to concurrently conduct pathogen surveillance.
10. Tick surveillance. Tick surveillance continued in 2020 was very limited in scope due to the pandemic and staffing availability.
11. Biting insect reports. In conjunction with Range Operations, standard optional biting insect surveys are provided to military units when reserving training areas. However, no reports were received in 2020 presumably due to the pandemic.
12. Spider survey. The IPMC initiated a formal spider survey program beginning in CY 2020 and continued into CY 2021. Base Operations Support contract pest control sticky traps are examined by the IPMC, and spider taxonomy and numbers are recorded. This task in conjunction with other IPMC arthropod inventory work will (a) support documentation that brown recluse spiders are not evident on the installation despite frequent contradictions by installation community members and (b) contribute to the arthropod species inventory. Spider inventory work preceding the routine surveillance documented several species but no brown recluse spiders (*Loxosceles reclusa*) have ever been documented on the installation. This is expected because JBLE-E is located outside the geographical range of *Loxosceles reclusa*. This fact combined with surveillance data suggests the risks of this species occurring on the installation remains very low. Surveillance will continue.
13. Pest Management Quality Assurance Evaluators (PMQAE). New PMQAEs need to be assigned and trained for the BOS (pest control), grounds maintenance contract, and the railroad right-of-way vegetation control contract.
14. New construction termite control. Termiticides containing the active ingredient fipronil are the preferred termicides (vs imidacloprid-based termiticides) based on AFCEC recommendation for the following reasons: Imidacloprid is water soluble and thus can be removed by plants. This is particularly important in coastal wet environments having high water tables which is the case with geography of Fort Eustis. Imidacloprid can leach out whereas fipronil (which is not water-soluble) binds to organic soil particles. This reduces environmental impacts and has a longer retention time towards controlling termites.
15. IPM policy/Integrated Vector Management (IVM)/biting arthropod-related education/awareness for the installation community. Installation IPM policy (and tick awareness) is presented at the Activity Environmental Management (AEM) training classes twice per year; however the pandemic precluded much of this in CY 20. This will continue once on-site AEM training becomes reinstated. Tick Awareness presentations and information handouts were delivered during Earth Day events in April 2021. IPM and disease vectoring arthropods topics were presented at Fort Eustis field sanitation course on 21 April 2021. IPM policy and tick awareness at Fort Eustis was presented at Newcomers Orientations in 2021. A presentation that included tick awareness and ways to reduce mosquito breeding was provided to the Army Community Service Virtual Spring Break Camp on 6 April. These topics will be presented at a Marine Warrant Officer Advanced Course scheduled for August 2021.
16. JBLE-E Arthropod Inventory. The IPMC published an arthropod inventory in December 2018 (Christensen. *Insects, Other Arthropods & Other Invertebrates Observed on Fort Eustis: Understanding the Significance of Invertebrate Taxa on Military Missi*ons, 27 Dec 2018). This document was incorporated into the revised JBLE-E Integrated Natural Resources Management Plan (signed/approved by the Installation Commander 5 June 2019) and the revised IPMP awaiting approval. This inventory remains a living document and is updated periodically. Fort Eustis continued to participate in the Cooperative Agricultural Pest Survey/Exotic Wood Boring Beetle Survey with Virginia Polytechnic Institute & State University Insect Identification Laboratory. The Laboratory provided CY 2020 data collected from the installation, and installed new traps in March 2021. CEIE staff began documenting arthropod observations as of March also and will continue survey work through the CY. An updated arthropod inventory will be published at the end of the CY. This contributes to forest pest management on the installation.
17. Honeybee colonies. Occasionally, new honeybee colonies break away from feral colonies on the installation. During these situations the new colony establishes a temporary resting place while scouts search for new permanent

home. This rarely poses and issue as the species is not aggressive and the resting site is used for 2-3 days before departing. One new colony used a tree near BLDG 1102 in March-April 2020. Cold weather made the colony inactive for several days and a high mortality occurred as a result of heavy rainfall. Another new colony remained attached at a fire hydrant near BLDG 2730 for less 2 days.

18. Unauthorized pest control activities. All pest control occurring on the installation must be performed in accordance with the IPMP. In September 2020, a food handling facility (Pizza Hut) contracted with Orkin without approval as the Base Operations Contract is responsible for pest surveillance and control of pests at this facility. The BOS Contracting Officer Representative informed Pizza Hut this was unauthorized. It is unknown what pesticide was used or the quantity, or whether a pesticide application was even needed. This is the only known violation since the IPMP was approved. The IPMC will propose a control plan to preclude unauthorized applicators from accessing the installation.

19. Future considerations.

- Staffing availability and continued cooperative efforts between CES and MAHC DPH should allow improvements in mosquito and mosquito-borne pathogen surveillance beginning in mid-CY 2021.
- BOS contract currently includes surveillance for gypsy moth. IPMC is reviewing to determine if this is necessary.

VIII. Installation Pesticide Application Points of Contact

	Pest Management Supervisor	Pest Management NCOIC
Name	N/A	N/A
Duty Title		
Office Symbol		
Street Address		
City, ST Zip Code		
Phone Number		
DSN		
e-mail		

	Golf Course Superintendent	Natural Resources / Environmental
Name	Jacob Adams	Timothy P. Christensen
Duty Title	Maintenance Superintendent	Natural Resources Manager
Office Symbol		733 CES/CEIE
Street Address		1407 Washington Blvd
City, ST Zip Code	Fort Eustis VA 23604	Fort Eustis VA 23604
Phone Number		757-878-4231
DSN		
e-mail		Timothy.p.christensen.civ@mail.mil

	Grounds Maintenance Supervisor	Contract Quality Assurance Evaluator
Name	NA	TBD
Duty Title		
Office Symbol		
Street Address		
City, ST Zip Code		
Phone Number		
DSN		
e-mail		

	Flight Safety/BASH POC	Other
Name	Teddy Harlow	
Duty Title	Airfield Safety Officer	
Office Symbol		
Street Address	BLDG 2411	
City, ST Zip Code	Fort Eustis, VA 23604	
Phone Number	757-878-5665	
DSN		
e-mail	Teddy.d.harlow.civ@mail.mil	

IX. FY21 Annual IPMP Certification

This FY20 Annual IPMP Update is submitted by:	
Name	Timothy P. Christensen
Duty Title	IPMC
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Pest Management Consultant
Armando Rosales
Command Entomologist
AFCEC/COSC
139 Barnes Dr. Suite 1
Tyndall AFB, FL 32403

Maintain a signed copy of this form with the IPMP.

APPROVED BY:

CAPELLAN.MIGUEL.L.1016538660

Digitally signed by CAPELLAN.MIGUEL.L.1016538660
Date: 2021.08.17 12:01:25 -04'00'

MIGUEL L. CAPELLAN
Director, 733 CES

DATE: 17 Aug 21