

# PPMA's AI Research Findings

November 2020

## Spiders

- Engagement around the topic of spiders decreased 1% from October 2020 to November 2020, representing the smallest decrease out of any other core pest during that time.
  - Despite this national decrease, multiple states saw large increases in engagement, including Arkansas and Kansas at 98% and 64%, respectively.

## Engagement around spiders

For entire US

| Month         | Engagement  |
|---------------|-------------|
| November 2020 | 1% Decrease |

Spiders had the smallest decrease this month.

| State        | % increase in engagement from October |
|--------------|---------------------------------------|
| Arkansas     | 98%                                   |
| Kansas       | 64%                                   |
| Illinois     | 59%                                   |
| Wisconsin    | 51%                                   |
| Georgia      | 16%                                   |
| Pennsylvania | 12%                                   |
| California   | 5%                                    |

## • Bed Bugs

- Engagement around the topic of bed bugs decreased 3% from October 2020 to November 2020, representing the second-smallest decrease out of any other core pest during that time.
  - Despite this national decrease, multiple states saw large increases in engagement, including Oregon and New York at 100% and 91%, respectively.

## Engagement around bed bugs

| For entire US |             |
|---------------|-------------|
| Month         | Engagement  |
| November 2020 | 3% Decrease |

Bed bugs had the 2<sup>nd</sup> smallest decrease this month.

| State      | % increase in engagement from October |
|------------|---------------------------------------|
| Oregon     | 100%                                  |
| New York   | 91%                                   |
| Ohio       | 56%                                   |
| Washington | 52%                                   |
| Texas      | 35%                                   |
| Nevada     | 29%                                   |

## Mosquitoes

- Engagement around the topic of mosquitoes decreased 6% from October 2020 to November 2020, representing the third-smallest decrease out of any other core pest during that time.
  - Despite this national decrease, multiple states saw increases in engagement, including Arkansas and Illinois at 25% and 8%, respectively.

## Engagement around mosquitoes

For entire US

| Month         | Engagement  |
|---------------|-------------|
| November 2020 | 6% Decrease |

Mosquitoes had the 3<sup>rd</sup> smallest decrease this month.

| State      | % increase in engagement from October |
|------------|---------------------------------------|
| Arkansas   | 25%                                   |
| Illinois   | 8%                                    |
| Louisiana  | 3%                                    |
| California | 2%                                    |
| Maryland   | 2%                                    |
| Texas      | 2%                                    |
| Florida    | 1%                                    |

# Most Problematic Pests by % of November Engagement

These are the pests that had the highest engagement in November overall

| Pest       | November Engagement |
|------------|---------------------|
| Rodents    | 1,202,502           |
| Raccoons   | 711,743             |
| Millipedes | 494,210             |
| Earwigs    | 291,120             |

## Health & Home Concerns

These pests were of most concern in November as they relate to potential health and home threats.

| Pest       | November Engagement |
|------------|---------------------|
| Rats       | 266,202             |
| Mosquitoes | 125,269             |
| Bats       | 116,201             |

# Most Problematic Pests Since October 2020

These are the pests that have had the highest increases in engagement since October. This does not take into consideration the pest's overall engagement for the month of November.

| Pest       | % increase from October |
|------------|-------------------------|
| Rodents    | 29.7%                   |
| Raccoons   | 21.9%                   |
| Millipedes | 13.6%                   |
| Earwigs    | 5.6%                    |
| Possums    | 4.2%                    |
| Crickets   | 4.0%                    |

# Where are people seeing Rats, Mice and Rodents?

| Location      | % increase from October |
|---------------|-------------------------|
| Attic         | 23.6%                   |
| Garage / Shed | 15.4%                   |
| Living Room   | 11.7%                   |
| Bedroom       | 9.8%                    |
| Backyard      | 6.1%                    |
| Car           | 3.8%                    |
| Basement      | 2.7%                    |
| Kitchen       | -23.2%                  |
| Bathroom      | -30.7%                  |

# Topic Discovery: Spiders

| Topic                  | Insight   |
|------------------------|---|
| Behavior Changes       | <ul style="list-style-type: none"><li>• Individuals online are showing a 1% increase in spider bites in 2020 compared to 2019.</li></ul>  |
| Key Locations          | <ul style="list-style-type: none"><li>• As people remain in their homes, spiders are being forced away from areas that were typically not used by people. Sightings of spiders in backyards, garages/sheds and basements have increased by 91%,44% and 32%, respectively. Engagement on sightings has also increased in the living room and kitchen throughout this time, albeit minimally.</li></ul>   |
| Reporting Demographics | <ul style="list-style-type: none"><li>• In both 2019 and 2020, those between the ages of 25-34 and 55+ were proportionately the most engaged age groups. In 2019, women were more engaged than men by 6%, but in 2020, that number flipped with men now more engaged than women by 2%.</li><li>• In 2019, women between the ages of 18-35 were most likely to discuss their spider sightings online, but in 2020, that age demographic shifted to those between the ages of 25-34 and 65+.</li><li>• States with the most proportional engagement on spiders in general in 2020 were Washington, New Hampshire and Kansas. The states with the most overall engagement in 2020 were California, Texas and New York.</li></ul> |