IACUC POLICY ON CAGE DENSITY OF MOUSE BREEDER CAGES
Updates from the 8th Edition of “The Guide for the Care and Use of Laboratory Animals” meant the IACUC had to re-evaluate its cage density policy.

The IACUC has tried to blend new Guide requirements with the long standing, performance based UNC policy.
INVESTIGATOR RESPONSIBILITIES

- Record Date of Birth for each litter (on cage)
- Assess cage density to confirm it is compliant with IACUC requirements
- **Wean** pups ≥10 grams in weight
- Correct any cages marked with the yellow “Action Required” by the date listed on the yellow card
Identify that there is/are litter(s) in the cage

Record Date of Birth on breeding card and place on the front of the cage (use quick guide if you are unsure of DOB)

- DOB will be used later to comply with weaning requirements

<table>
<thead>
<tr>
<th>DAY</th>
<th>EVENT</th>
<th>DAY</th>
<th>EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Skin real red; Short curly whisk; umb cords</td>
<td>8</td>
<td>Fuzz on belly</td>
</tr>
<tr>
<td>2</td>
<td>Straight, Fine Whisks; Skin lighter red</td>
<td>9</td>
<td>Fur back; Last day belly translucent, Milkbands</td>
</tr>
<tr>
<td>3</td>
<td>Ear “nubs” prominent</td>
<td>10</td>
<td>Top teeth erupted; belly slight fuzz</td>
</tr>
<tr>
<td>4</td>
<td>Pink smoother skin; Ear flaps 1/2 up, down</td>
<td>11</td>
<td>Fully furred; Fur short &amp; smooth</td>
</tr>
<tr>
<td>5</td>
<td>Ears up; White fuzz across shoulders</td>
<td>12</td>
<td>Nipples visible</td>
</tr>
<tr>
<td>6</td>
<td>Bottom teeth erupted</td>
<td>13</td>
<td>Eyes open</td>
</tr>
<tr>
<td>7</td>
<td>Entire back slightly furred</td>
<td>14</td>
<td>Ears open</td>
</tr>
</tbody>
</table>
Cage densities for breeding cages are based on:
- Type of rodent caging
- Number of adults in the cage
- Number of litters in the cage

You must look at each of these factors to determine if the cage is in compliance.

This can get a little complicated because some rodent cages have different amounts of “floor space”
CAGE FLOOR SPACE

- Static Microisolator Cages - 70 square inches
- Tecniplast Green Line Cages - 78 square inches
- Tecniplast Blue Line Cages - 82 square inches
SPACE REQUIREMENTS WITH A SINGLE LITTER*

- With only 1 adult, you can have an unlimited number of pups in the cage.

- With 2 adults, you can have an unlimited number of pups in the cage.

- With 3 adults, you can have an unlimited number of pups in the Blue Line cage.

* Until pups reach 10 grams
LIMITS WITH MULTIPLE LITTERS

Applicable when **both of these are true:**
You have more than one litter **AND** one litter reaches 14 days of age

<table>
<thead>
<tr>
<th>Limits for Multiple Litters</th>
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</thead>
<tbody>
<tr>
<td><strong>Number of Adults</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Cages must be made compliant once these guidelines are exceeded!!**
Pups **MUST** be weaned at ≥10 grams regardless of:

- Cage Type
- Number of adults
- Number of litters
- Amount of pups
<table>
<thead>
<tr>
<th>Weight of each mouse</th>
<th>Floor Space for each mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10 grams</td>
<td>6 sq. inches</td>
</tr>
<tr>
<td>Up to 15 grams</td>
<td>8 sq. inches</td>
</tr>
<tr>
<td>Up to 25 grams</td>
<td>12 sq. inches</td>
</tr>
<tr>
<td>&gt; 25 grams</td>
<td>≥ 15 sq. inches</td>
</tr>
</tbody>
</table>
Options for Correcting An Overcrowded Cage

Correct any overcrowded cages by:

- Removing the male
- Removing a female
- Moving a mother and her litter
- Culling pups
- Splitting cages-Weaning animals according to Cage Density Policy
DLAM RESPONSIBILITIES

- Check cages carefully and mark any cages that are overcrowded with a yellow “Action Required” card that lists a date by which the investigator (YOU) must correct (within 48 hours!)
  - Cards placed on the cage on a Thursday or Friday should have Monday’s date as the deadline.
- After that date expires, DLAM is required to correct the overcrowded cage and assess a separation charge, without having to notify the investigator.
WHAT HAPPENS IF YOU CAN’T COMPLY?

• Contact the IACUC if you cannot comply with the policy.

• The IACUC will consider requests for an “Exception” to this policy on a case by case basis if the PI provides scientific justification with documentation.

• “Exceptions” do not go into effect until the PI has received written notification from the IACUC.
TAKE HOME POINTS!!!

- Know the policy!
- Check cages carefully and label DOB as soon as you can!
- Keep cages in compliance with IACUC policy by:
  - Separating Animals
  - Weaning animals according to Cage Density Policy
  - Culling pups
- Correct any cages with Action Required Cards within 48 hours or DLAM will correct it for you.
TAKE HOME POINTS!!!

Failure to comply can potentially result in IACUC sanctions and loss of valuable resources:
- Grant money
- Loss of animal lives
- Time needed to recover research lost if animals had to be euthanized

Overcrowded cages are also stressful to the animals!
QUESTIONS?