The Impact of Restricted Grazing Systems on the Behaviour and Welfare of Ponies

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Abstract

Background: Equine obesity is a growing concern, much of the current management advice centres on dietary restrictions, including the removal or limitation of grazing. Little is known about the effectiveness and impact of this approach on the overall welfare of the horse. Objective: This study investigates the impact of two commonly used grazing systems advocated for the control of weight – the ‘strip-grazing’ system and the ‘track’ system - on the behaviour and welfare of outdoor living ponies. Study design: A within-subject cross-over experimental design was used with four groups of pasture kept ponies experiencing each system for 4 weeks in a random order. Methods: Time budgets and behavioural indicators of welfare were measured using 24-hour electronic surveillance, morphometric parameters including weight, body condition score and cresty neck score were measured weekly and activity levels were tracked using GPS tracking units. Results: Ponies moved more (median (IQR), track: 3.23\% (2.08\%), strip: 2.02\% (0.90\%); \textit{P} = 0.001) and travelled a greater distance in 24-hour period (median (IQR), track: 7013.47m (1761.49m), strip: 5331.91m (494.16m); \textit{P} < 0.001) and engaged in less overt agonistic behaviour on the track system compared with the strip system (median IQR; track: 0.14 (0.30), strip: 0.21 (0.37) \textit{P} = 0.02). Main Limitations: A relatively short time period of exposure to each grazing system. Conclusions: Track systems resulted in a significant increase in ambulatory behaviour compared with the strip system. Increased levels of agonistic interactions on the strip system maybe the result of perceived reduction of space or a spatial concentration of resources compared to the track system, although the actual accessible area was the same. These results suggest that there may be physical health benefits to the track system as the ponies engaged in more voluntary low intensity exercise as well as improvements to overall welfare.

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Main Limitations: A relatively short time period of exposure to each grazing system.

Conclusions: Track systems resulted in a significant increase in ambulatory behaviour compared with the strip system. Increased levels of agonistic interactions on the strip system maybe the result of perceived reduction of space or a spatial concentration of resources compared to the track system, although the actual accessible area was the same. These results suggest that there may be physical health benefits to the track system as the ponies engaged in more voluntary low intensity exercise as well as improvements to overall welfare.

Keywords: Obesity, weight loss, grazing, welfare

Introduction

Obesity is an increasing welfare concern in leisure horses with 31.2% of horses identified as being obese in one owner-reported survey in Britain [1]. Equine obesity is associated with significant health concerns, including equine metabolic syndrome (EMS) and laminitis [2]. Certain risk factors for developing obesity have been identified including use, with more leisure horses being obese, and breed [1; 3-6].

The mainstay for the treatment of EMS and other obesity related conditions is primarily focused around weight loss [7] which, if sufficient, can result in a complete reversal of the associated metabolic dysfunction [2]. Recommendations for weight loss centre around restricting dietary intake which often involves a reduction in forage consumption and restriction of grazing [8-11]. Grazing is a central facet of equine behaviour, and horses graze for approximately two thirds of their time budgets if allowed [12] and in the wild demonstrate clear diurnal rhythms to grazing [12]. The nature, size, quantity and timing of the grazing available therefore has an impact not only on grazing behaviour but consequently on all other behaviours [13; 14]. If grazing is restricted the impact on the behaviour needs may lead to expression of problematic and/or abnormal behaviour, such as increased aggression and stereotypic behaviour [6; 15]. The duration of the restrictions required to achieve the desired weight loss goal is often significant, compounding any compromises to welfare further. Additionally, a decrease in efficacy of dietary restriction over time has been shown in both humans and horses [5], requiring more extreme levels of restriction if this method is to remain effective. Owners can also struggle with compliance when it comes to the weight control programmes for their horses which may be due to several factors including practical limitations, adverse responses and unwanted horse behaviour [10].

In the UK, the ‘strip’ system is the most common form of restricted grazing which owners implement [16]. The strip system involves limiting the grazing area to a, usually rectangular, portion of the field and increasing the size of this area over time by moving the fencing. Recent work has shown that digestible energy intake is reduced when ponies initially go onto strip grazing compared with free grazing [17] and that strip grazing can potentially limit weight gain in ponies [18]. In recent work by Cameron et al a great number of owners also expressed a desire to try the ‘track’ system [16] and this system is the most common “alternative” grazing system used [19]. The ‘track’ system involves creating a track around the perimeter of the grazing area which can be increased in size gradually and it is designed to encourage movement though current data available is not conclusive on this [20]. Data relating to track systems remains very limited [21] and there is little information comparing the behavioural impact of these systems.

The aim of this study was to determine the impact strip and track grazing systems have on the behaviour and grazing patterns of outdoor living ponies. It was hypothesised that the track system would allow for
move free movement of the animals, would have fewer negative impacts on behaviour and would disrupt the natural rhythm of grazing less.

**Materials and Methods**

**Animals**

A convenience sample of thirty-five outdoor-living ponies in kept in four herds in the east of England were included in the study. The herds were on pasture 24 hours a day without any supplemental feeding and had lived together for a minimum of 3 months prior to the onset of the study so that group social relationships were considered to be stable and well established. Routine preventative health care, veterinary requirements and pasture management were delivered as normal during the period of the study.

**Study Design**

The study was conducted during July and August 2019 when grazing was sufficient to provide all dietary requirements. A within-subject study design was used with each group experiencing 4 weeks living on a strip system and 4 weeks living on a track system in a randomly allocated order.

![Fig. 1 An aerial view of A - a track system and B - a strip system. The field perimeters are marked in red along with the initial area accessible on week 1. Additional weekly electric tape movements are marked out](image-url)
in purple. Both the initial area and weekly additions are matched for each system, so each group has access to the same area of grazing on both systems and all weekly additions are the same for each group.

The grazing areas accessible to the ponies initially were calculated in hectares using field management software (Gatekeeper, Farmplan) and matched so they were the same on both grazing systems for each group. GPS co-ordinates were used to position the electric fencing that was erected to create the different systems within the allocated fields. All horses were habituated to electric fencing prior study’s onset. Eight fields were used, and all fields were rested for over a month prior to use to ensure adequate and consistent grass coverage. The electric fencing was moved once weekly, on the track system and twice weekly on the strip system when required.

The study received local ethical approval at the [masked for review].

Morphometric Measures

Body Weight

Body weight was measured in kilograms using a mobile weighbridge (Tokyo Thoroughbred, Horse Weigh®) at the start, end and weekly for the duration of the study. Groups and individuals were weighed in a randomly selected order each week.

Body Condition Score and Cresty Neck Score

Body condition score (BCS) and cresty neck score (CNS) were recorded at the same time as weight. BCS was scored on a 0-5 scale [22] and CNS on a 0-5 scale [23] by a single trained and experienced operator.

Behavioural Observations

A mobile video surveillance system was used to record the behaviour of each group for a 24-hour period once weekly on a randomly allocated day, avoiding Mondays due to collection of morphometric measurements. Four 4 megapixel motorised varifocal lens bullet cameras (Hikvision, Farmwatch LTD) were attached to 3m poles and secured to fence posts around the field perimeter positioned to achieve the best coverage of the entire grazing area. A 4 channel NVR 1TB hard drive (Hikvision, Farmwatch LTD) was used for recording and playback of all video footage. Infrared floodlights were used during darkness to increase the night vision scope of the cameras. Instantaneous scan sampling [24] of all visible ponies was performed at 15 minute intervals throughout the 24 hour recording period and behaviour was categorised according to the following ethogram: grazing; browsing; walking; trotting; cantering; galloping; drinking; standing; sternal recumbency; lateral recumbency; self-grooming; urination; defecation; play; allogrooming; overt agonistic interactions; and stereotypic behaviour. We also used continuous observation to record all instances of the behaviours thought to be most indicative of welfare status, both positive (play and allogrooming) and negative (overt agonistic interactions and stereotypic behaviour) [25-27].

Time budgets of maintenance behaviours (total number of recordings of each of the maintenance behaviours divided by the total number of recordings of ponies visible) were calculated as percentages. The hourly prevalence rate of behaviours indicative of welfare status were calculated.

Galloping was never recorded so was removed from the analysis. Trotting and cantering also occurred infrequently so were combined with walking to form an ‘ambulating’ behavioural category. Defecation and urination were rarely recorded and so were combined into a single ‘elimination’ category.

Activity Levels

Distance travelled per 24 hours was recorded in metres using GPS dataloggers (tsi Transystem GL-770) attached to headcollars. Four ponies from each group were pseudo-randomly selected after excluding those individuals considered to be unsuitable, either due to health reasons or because they were not habituated to wearing a headcollar. A GPS unit was used to record movement for each pony over a 24-hour period once a week on a randomly allocated day, excluding Mondays (see above). Each GPS unit was attached for a minimum of 24.5 hours so that the first and last 10 minutes of recording could be discarded because it
incorporated the fitting and removal of the headcollar. Recordings of less than 1-hour were removed from the data set. A weekly group average was calculated from all remaining data and used for statistical analysis.

**Statistical Analysis**

All statistical analysis was performed using Minitab version 17. The normality of all data was assessed using Anderson-Darling tests and any data found to be nonparametric were log transformed. Where data were nonparametric, all descriptive statistics and graphical representations are presented in medians and interquartile ranges.

The effects of grazing system (Strip, Track), week (1-4)) and their interaction were evaluated for each of the dependent variables. Initial analysis on each data set was performed using a general linear model (GLM) with grazing system, week and their interaction as fixed factors and group included as a random factor. Where week was found to significantly influence the dependent variable, further post-hoc evaluation using a pairwise comparison Tukey test was used to evaluate any differences between weeks. Significant interactions between week and grazing system were examined for each week separately to reveal whether there was a difference between the two grazing systems, using a GLM with grazing system as a factor. Additionally, both grazing systems were examined separately to see if there was an overall difference between the 4 weeks, using a GLM with week as a factor. Where significant results were found, differences between individual weeks were further examined using a pairwise comparison Tukey test. Statistical significance was taken as P <0.05.

Grazing behaviour was further investigated for the presence of a circadian rhythm. Each 24-hour time sampling period was split into four time periods: morning, afternoon, evening and night. Morning was defined as the period between sunrise and midday. Afternoon was defined as the period between midday and 17:00. Evening was defined as the period between 17:00 and sunset. Night was defined as the period between sunset and sunrise. The daily sunrise and sunset times were acquired from timeanddate.com. Percentage time spent grazing was determined by taking the total grazing behaviours in a time period and dividing by the total grazing behaviours observed in the complete 24-hour period. To establish whether percentage of the total time spent grazing was significantly different between time periods and then between grazing systems across a 24-hour period, a two-way ANOVA with appropriate post-hoc tests were performed.

**Results**

**Descriptive Statistics**

The size of the groups ranged from 7 to 11 ponies (group 1 n= 7, group 2 n= 11, group 3 n= 10 and group 4 n = 7) and groups were either geldings only (Groups 1 and 4) or a mixture of mares and geldings (Groups 2 and 3). 28.6% of the ponies were mares and 71.4% were geldings. All ponies included were either native types or cob types with a mean age of 6.8 years, ranging from 4 to 13 years. Across all groups median BCS at the start of the study was 4.5 (IQR 2) and the prevalence of obesity (BCS [?] 4/5) was 83%.

**Bodyweight and Condition Scores (BCS, CNS)**

We found no significant differences between weeks, grazing system or their interaction for any of the morphometric measurement changes: body weight (grazing system; F$_{1,21}$ = 0.09, P = 0.8, week; F$_{3,21}$ = 0.60, P = 0.6, interaction between week and grazing system; F$_{3,21}$ = 1.08, P = 0.4), BCS (grazing system; F$_{1,21}$ = 0.50, P = 0.5, week; F$_{3,21}$ = 0.76, P = 0.5, interaction between week and grazing system; F$_{3,21}$ = 1.08, P = 0.4) and CNS change (grazing system; F$_{1,21}$ = 0.10, P = 0.8, week; F$_{3,21}$ = 1.28, P = 0.3, interaction between week and grazing system; F$_{3,21}$ = 0.91, P = 0.5).

**Behavioural Observations**

In both systems, ponies spent the majority of their time grazing (Table 1). Ponies spent more time ambulating on the track system than on the strip system (median (IQR), track: 3.23% (2.08%), strip: 2.02% (0.90%); F$_{1,20}$ = 15.17, P = 0.001). There was a significant effect of week on ambulatory activity on the track system but not the strip, with an increase in ambulation over time peaking at week 3 (F$_{3,11}$ = 6.58, P = 0.008) and variations seen between weeks 1 and 3 (Median (IQR), week 1: 1.82% (1.65%) and week 3: 5.83% (2.84%),
Tukey test: $T = 3.68$, df = 11, $P = 0.02$) and weeks 2 and 3 (Median (IQR), week 2: 2.23% (1.27%) and week 3: 5.83% (2.84%), Tukey test: $T = 3.91$, df = 11, $P = 0.01$). Overall, when measured as part of time budgets, horses on the track system engaged in more behaviours considered to be most reflective of welfare status, (median (IQR), track: 2.53% (2.96%), strip: 1.80% (1.56%); $F_{1,26} = 4.81$, $P = 0.03$) these behaviours included play, allogrooming, overt agonistic behaviour and stereotypies and were analysed in more detail using continuous observation (see next section).

Key behavioural indicators of welfare

Overt agonistic behaviour was increased in the strip grazing system compared with the track system (median IQR; track 0.14 (0.30) v strip 0.21 (0.37) $F_{1,22} = 6.60$, $P = 0.02$), no other behaviours differed (Table 2). Week had a significant effect on the prevalence of overt agonistic interactions between weeks ($F_{3,22} = 15.96$, $P < 0.001$) with the highest rates seen in week 1 and reductions in subsequent weeks (median (IQR), week 1: 0.50 per hour (0.12 per hour), week 2: 0.21 (0.39 per hour), week 3: 0.14 per hour (0.12 per hour) and week 4: 0.11 per hour (0.16 per hour)).

Week was found to impact the prevalence of allogrooming performed ($F_{3,23} = 3.81$, $P = 0.02$) and, although there was no significant difference between any individual pairs of weeks, the highest rate occurred in week 1 followed by a tendency to reduce in weeks 2 and 3 (Mean (+/- SE), week 1: 0.97 per hour (+/- 0.23 per hour), week 2: 0.56 per hour (+/- 0.13 per hour), week 3: 0.47 per hour (+/- 0.13 per hour), week 4: 0.47 per hour (+/- 0.15 per hour)).

Activity Levels

Ponies moved a greater distance in 24 hours on the track system than on the strip system (see Fig. 2 median (IQR), track system: 7013.47m (1761.49m), strip system: 5331.91m (494.16m); $F_{1,21} = 26.86$, $P < 0.001$). There was no significant effect of week ($F_{3,21} = 1.74$, $P = 0.2$).

Fig. 2 Distance travelled in metres when ponies were managed on a track system compared to an area matched strip system ($P < 0.001$). Data are mean +/- standard deviation.

Grazing behaviour

The grazing behaviour demonstrated a distinct bimodal circadian rhythm with increased grazing in the morning and in the evening and less in the afternoon and at night ($F_{1.5, 43.1} = 149.8$, $P < 0.0001$) (Fig 3A). This rhythm was maintained across the two grazing systems (Fig 3B) and there were no differences between the two ($F_{1, 88} = 0.0$, $P > 0.9$).

Fig. 3. Percentage of total time spent grazing by all animals in the study combined [A] and animals divided in to strip or track grazing systems [B]. There was a significant difference in the time spent grazing during different periods of recording. Data are mean +/- standard deviation.

Discussion

With obesity affecting almost 40% of leisure horses management strategies require scrutiny to ensure they do not inadvertently introduce more problems for the horses, owners and veterinary professionals implementing them. The most commonly used method of restrictive grazing implemented in the UK is strip grazing but owners also report using the track systems and, interestingly, show a desire to try this system in future because of the perceived improved welfare it offers [16]. In this study we considered the effect of two different grazing systems on behaviour and welfare, and our findings support the hypothesis that the track system does appear to promote improved behaviour and welfare in line with owner perception. The mainstay of treatment for obesity is weight loss through reducing calorie intake and, if sufficient, this can successfully reverse many of the metabolic consequences [2]. Reducing the intake of horses kept at grass can often be difficult but is preferable to long term stabling from a welfare stand point, a concept owners appear to appreciate [16]. Ideal management systems should provide for both physical and psychological good health.

No significant changes were seen in the morphometric parameters (bodyweight, BCS, CNS) that we measured.
which is perhaps unsurprising given the relatively short period of this study (4wks in each grazing system), and the levels of dietary restriction were unlikely to be as severe as those used in other weight management studies due to continuous access to grass. Weight loss studies have shown that even with significant dietary restrictions, effective weight loss can take several months [10]. Increased risk of obesity in noncompetition animals may be associated with increased amounts of turnout time [1; 28] indicating that weight is harder to manage on pasture. Ponies should have a natural variation in body weight according to season with increasing body weight in the summer grazing season and weight loss in winter where food is sparse and living conditions are tougher [3]. It stands to reason that achieving weight loss in outdoor living ponies in summer is going to be challenging and, realistically, the aim of long-term weight control should be to minimise weight gain in the summer and optimise weight loss in the winter.

Horses are herbivorous trickle feeders that spend a large proportion of their day grazing [29]. Breaks between grazing bouts are relatively short and fasting does not typically last for more than 4 hours [30]. Horses naturally spend much of the day moving over vast distances between resources. The ponies in this study grazed for around 68% on both systems of the time in line with other studies [31]. They also demonstrated a range of behaviours, including ambulating, predominantly at walk, browsing, self and allogrooming and lying down. The time budgets found in this study for both systems are consistent with those in previous studies looking at domestic horses in free and strip grazing [12; 31]. However, there was a significant increase in the daily ambulation and distance travelled on the area matched track system compared with the strip system in our study. Previous studies vary in their findings regarding voluntary exercise but Hampson et al. (2010) reported that larger paddock sizes were correlated with increased distances moved and feral horses moved on average 17.9km/day which is substantially more than the 7.2km/day achieved by those on large 16 hectare paddocks [20] but still nowhere near that travelled by feral horses for example in the Australian outback who can travel up to 28.3km in a day [32].

The effect of internal fence design was also tested by Hampson et al. (2010) using several different configurations including the ‘racetrack’ design similar to the track system used in our study [32]. No difference was found between the open field, where there was access to the entire field, and the racetrack system, where there was only access to the outer area, which indicates that track type systems may compensate for a restriction of grazing and space. Our findings along with others such as Maisonpierre et al. (2019), support the hypothesis that intensive management and space restriction are likely to have a negative impact on the levels of voluntary exercise that domestic horses perform [13]. Previous work has shown that, compared with an open field, strip grazing did not reduce movement and so our work implies that trackway systems actively encourage an increase in movement [31]. Although previous evidence looking at the benefits of low intensity exercise in horses is conflicting, there is support that it may provide health benefits. Laat et al. (2016) demonstrated that the use of dynamic feeding systems, designed to increase movement, over a 3-month period resulted in a decrease in body fat and an improvement in BCS [33]. It has also been shown that low intensity exercise programmes, with and without concurrent calorie restriction, resulted in improvements in metabolic health and systemic inflammatory biomarkers compared to dietary restriction alone [34; 35]. We found that ambulation increased with each passing week which may be explained by habituation as the ponies become increasingly comfortable and thus explorative in their environment. This bears consideration when determining the impact of systems like rotational grazing, that may result in relocation so frequently that habituation is compromised.

Ponies on the track system engaged in more behaviours which we considered to be most indicative of welfare status, potentially indicating a more diverse behavioural repertoire being displayed. This could be due to a more enriched environment, less competition over resources or improved social cohesion. We also found that allogrooming behaviour declined over the first three weeks across both systems. Although generally associated with positive social interactions [36], allogrooming rates have been shown to correlate negatively with the proportion of adult horses in a group which may be due to a lack of requirement to improve social relations when they are already well established [37]. The witnessed initial increases in rates of allogrooming seen in this study are therefore more likely to reflect a break down in social cohesion, given the concurrent increase in agonistic interactions, rather than an improvement.
The overall rate of overt aggression that we observed was low compared to other published data [37; 38] which may be due to our exclusion of more subtle signs of agonistic communication and limitation to overt behaviours. However, Sigurjonsdottir and Haraldsson (2019) reported that stability of group membership is strongly correlated with lower aggression and the groups included in our study were well established so a low rate of agonistic behaviour would be expected [37]. We observed a higher rate of overt agonistic interactions in the strip system which may be due to a perceived restriction of space and a spatial concentration of resources resulting in increased competition, as found in other species (e.g. pigs and automated feeders, or mice and enrichment etc.), and likely indicates increased environmental stressors as other known stressors, such as group composition, did not change [37]. Stereotypic behaviour only was observed in one pony during our study. This was a surprising and notable result as the carers of the ponies reported never having witnessed it previously and generally the risk factors for stereotypical behaviours were very low in the population observed. It was observed in weeks 1 and 2 on the strip system and never on the track system. Given that the presence of stereotypical behaviour is often described as a key indicator of poor welfare [26], this result may be cautiously interpreted as an additional indication of reduced welfare for the strip system.

The ponies in this study demonstrated a significant diurnal pattern to grazing, with most grazing taking place in the morning period, the grazing system did not affect this rhythm. To our knowledge this is the first description of such a rhythm in domesticated horses and reflects similar patterns seen in wild horses [39-41] as well as farmed sheep and cattle [42; 43]. Our observation has several implications, clearly stabling and meal feeding horses will disrupt this natural rhythm as may allowing horses to graze only at night. It is clear from human work that disruption to circadian rhythms or reversal of diurnal patterns increases metabolic risk as evidenced by work on shift workers [44], more work is required to determine the physiological and potential psychological impact of rhythm disruption in horses.

To conclude, the findings of this study support the hypothesis that more restrictive management practices, in this case a strip grazing system, can have a negative impact on the behaviour and welfare of ponies, and it is important to consider this when designing and implementing weight management programmes. This reflects the preliminary findings of Mitson and Greening (2019) demonstrating that track systems may promote more movement and positive welfare compared to strip systems [21]. As well as promoting better welfare, there may be additional physical health benefits to increasing movement that we failed to demonstrate over the time period assessed in this study. Further research is therefore needed to look at the potential physical health benefits of different grazing systems, including morphometric measurements and biomarkers of metabolic function, over extended periods of time. It is worth noting that any such research would benefit from being over a significant duration of time, potentially even multiple grazing seasons, as these systems are intended for more long-term management changes to control weight rather than reactive dieting in the face of obesity related ill-health.

References


Table 1 Overall time budgets (%) for each grazing system with normally distributed data displayed as mean (± StDev) and nonparametric data displayed as median (IQR). Statistically significant results are highlighted in bold.

<table>
<thead>
<tr>
<th>System</th>
<th>Grazing</th>
<th>Browsing</th>
<th>Ambulating</th>
<th>Standing</th>
<th>Sternal</th>
<th>Lateral</th>
<th>Self-grooming</th>
<th>Drinking</th>
<th>Elimination (urinate and defaecation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strip</td>
<td>65.28</td>
<td>0.40</td>
<td>2.02</td>
<td>21.97</td>
<td>4.51</td>
<td>1.01</td>
<td>0.54</td>
<td>0.44</td>
<td>0.13 (IQR 0.17)</td>
</tr>
<tr>
<td></td>
<td>(±4.57)</td>
<td>(IQR 1.19)</td>
<td>(±4.75)</td>
<td>(IQR 1.6)</td>
<td>(±0.38)</td>
<td>(±0.34)</td>
<td>(±0.16)</td>
<td></td>
<td>(IQR 0.17)</td>
</tr>
<tr>
<td>Track</td>
<td>64.73</td>
<td>0.67</td>
<td>3.23</td>
<td>19.05</td>
<td>3.95</td>
<td>0.68</td>
<td>0.37</td>
<td>0.51</td>
<td>0.12 (IQR 0.14)</td>
</tr>
<tr>
<td></td>
<td>(±6.94)</td>
<td>(IQR 2.71)</td>
<td>(±6.57)</td>
<td>(IQR 1.91)</td>
<td>(±0.30)</td>
<td>(±0.40)</td>
<td>(±0.39)</td>
<td></td>
<td>(IQR 0.17)</td>
</tr>
</tbody>
</table>

Table 2 Prevalence rates of welfare indicator behaviours (per hour) for each grazing system with normally distributed data displayed as mean (± StDev) and nonparametric data displayed as median (IQR). Due to the very low prevalence rate of stereotypic behaviour this is also displayed as mean (StDev). Statistically significant results are highlighted in bold.

<table>
<thead>
<tr>
<th>System</th>
<th>Play</th>
<th>Stereotypic</th>
<th>Overt Agonistic</th>
<th>Allogrooming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strip</td>
<td>0.13 (IQR 0.17)</td>
<td>0.01 (± 0.03)</td>
<td>0.21 (IQR 0.37)</td>
<td>0.68 (±0.54)</td>
</tr>
<tr>
<td>Track</td>
<td>0.13 (IQR 0.12)</td>
<td>0</td>
<td>0.14 (IQR 0.30)</td>
<td>0.53 (±0.39)</td>
</tr>
</tbody>
</table>